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INTERZONt

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RUDY RUCKER TERRY BISSON
STEVE ERICKSON PAUL DI FILIPPO

DAVID LANGFORD JOHN CLUTE NICK LOWE DAVID MACE ANDY HEDGECOCK
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MAUREEN KINCAID SPELLER & PAUL KINCAID ON JAMES TIDTREE, JR

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'The most exciting thing happening to the genre'
Lois Tilton, Internet Review of Science Fiction



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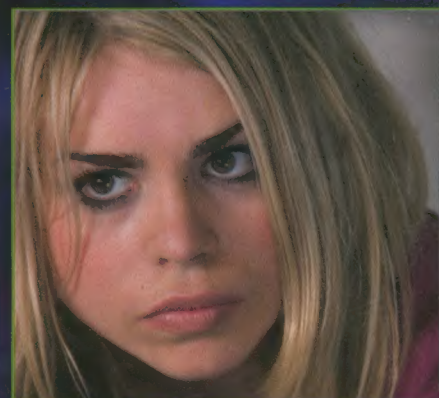
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EDITORIAL

INTERZONE ON TOUR

Last year we had an *Interzone* table at Interaction, and this year at Concussion (Eastercon), both in Glasgow. Now we are going across the pond.

Jetse will man an *Interzone* table in the dealers' room at two US conventions: LACon IV, the 64th World Science Fiction Convention, in Anaheim from August 23–27 (details at laconiv.org), and Dragon*Con in Atlanta from September 1–4 (details at dragoncon.org). If you're going to either one of these, please come over to the table and say hello!

At the WorldCon in Los Angeles, Jason Stoddard and his wife are helping us out in a big way, for which our thanks (by the way, we have a mind-blowing hard sf story from Jason, 'Softly Shining in the Forbidden Dark', coming soon). We are also in the process of arranging a suite at the Hilton to throw a small *Interzone* party. This suite hasn't been confirmed yet, but things are looking good, so see Jetse at our dealer's table and he will give you the magic room number.

Back in the UK most of the *Interzone* staff will be at FantasyCon in Nottingham from September 22–24 (details at fantasycon.org.uk). We've not decided yet if we'll have a dealer's table there, but we should be easy to find if you'd like to chat about the magazine, or anything else.

We have wild plans for next year and *Interzone's* 25th anniversary but we'll announce those a bit nearer the time. Watch this space and the online discussion forum (ttapress.com/discus). Please also use the forum to make your views known about *Interzone* stories or issues, or talk to any of the authors who have boards there.

Meanwhile, we hope you enjoy this issue. We wish each one could be at least 80 pages, as we've had to hold over Sarah Ash's MangaZone and other features. Fahrija Velic's promised cover will also happen. We've got some great stories in hand too, by Chris Beckett, Will McIntosh, Tim Akers, Jay Lake, Paul Meloy and many others.



AS OTHERS SEE US

Two views of *Doctor Who*! Billie Piper [above, in Episode 8 of the current series] isn't an sf fan: 'But when I read the scripts, I found it was a great balance between sci-fi, which can be a bit detached, and real, genuine, emotions.' (*BBC Top of the Pops Magazine*, 19 Apr) James Dyson of vacuum cleaner fame declares '...a loathing of *Dr Who*. I don't like science fiction, I like the real thing and there's a pretentiousness about *Dr Who* that I couldn't stand.' (*Independent*, 16 Apr)

BBC reporter James King on Richard (*Donnie Darko*) Kelly's new film *Southland Tales*: 'Don't expect aliens from outer space. It's sci-fi with brains...'

Jonathan Rhys Meyers is interviewed: 'I don't like sci-fi – I don't want to do anything with sci-fi. *Star Wars*? *Star Trek*? I'd rather eat turpentine and piss on a brush fire.' (*Premiere* magazine, June)

Douglas Adams is one of several names dropped in this review of a book by Jim Younger: '...reading *High John the Conqueror* is like watching a Douglas Adams-scripted episode of *Monty Python's Flying Circus*, in which Terry Pratchett and Irvine Welsh wrestle, naked, and Raymond Chandler keeps the score.' (Tom Gatti, *Times*, 20 May) I'm trying hard not to visualize this spectacle.

PUBLISHERS & SINNERS

Hachette Livre, owners of Little, Brown Book Group (formerly Time Warner) and its Orbit sf/fantasy imprint, plan to launch Orbit USA and Orbit Australia in the next 12–18 months.

Nature's invitation-only 'Futures' series of SF short-shorts is now open to all comers. Details from editor Henry Gee (h.gee@nature.com), who warns that 'the probability of getting a story accepted will probably be even less than having a real research paper accepted by *Nature*.'

ASSORTED AWARDS

BAFTAs. *Doctor Who* (BBC1) won the best drama series award.

BSFA. Novel: Geoff Ryman, *Air*. **Short:** Kelly Link, 'Magic for Beginners'. **Art:** Pawel Lewandowski, *Interzone* 200 cover. **Nonfiction:** Gary K. Wolfe, *Soundings*. **Arthur C. Clarke.** Geoff Ryman won his second Clarke bookend, plus a £2006 cheque, for *Air*. He joins the previous over-achievers, Pat 'Two-Bookends' Cadigan and China 'Two-Bookends' Miéville.

Philip K. Dick. M.M. Buckner won for her novel *War Surf*.

European Grand Masters. Harry Harrison; Arkady and Boris Strugatsky.

Nebulas. Novel: Joe Haldeman, *Camouflage*. **Novella:** Kelly Link, 'Magic for Beginners'. **Novelette:** Kelly Link, 'The Faery Handbag'. **Short:** Carol Emshwiller, 'I Live with You'. **Script:** Joss Whedon, *Serenity*. **Andre Norton Award:** (for YA books): Holly Black, *Valiant*.

DAVID LANGFORD'S ANSIBLE LINK

In Typo Veritas. From an sf novel about indefinite life extension: 'His second child, by some fluke, had proved to be immune to the immortality virus.' (Donald Moffit, *Second Genesis*, 1986)

Kurt Vonnegut's name is cleared: 'Vonnegut was misread when he was younger, labeled a science-fiction writer because his work took place in the future or involved speculative realities, when in fact this was just a strategy to address his themes.' (David L. Ulin, *LA Times*, 16 May) Mere sf authors could never do *that*.

Astronomy Masterclass. 'The Moon is only about one-quarter of the size of Earth. It does not spin on its axis so it keeps the same face towards the Sun at all times.' (Lynn D. Newton, *Meeting the Standards in Primary Science – A Guide to the ITT NC*, 2000)

Lori Jareo (who?) wrote a *Star Wars* novel called *Another Hope* and produced it through her own POD outfit, Wordtech. Lacking any authorization from Lucasfilm, the novel was of course shown only to family and friends. As Jareo explained: 'This is a self-published story and is not a commercial book. Yes, it is for sale on Amazon, but only my family, friends and acquaintances know it's there.' The incorrectness of that final clause was demonstrated by numerous gibbering Amazon review comments, the rapid vanishing of Ms Jareo's website, and – soon after – an Amazon decision that this title is currently not available.

George W. Bush is an sf reader: 'A book that the President did eventually read and endorse is a pulp science-fiction novel: *State of Fear*, by Michael Crichton. Bush was so excited by the story, which pictures global warming as a hoax perpetrated by power-mad environmentalists, that he invited the author to the Oval Office.' A visit which 'was not made public for fear of

outraging environmentalists all the more.' (David Remnick, 'Ozone Man', *New Yorker*, 24 Apr)

THOG'S MASTERCLASS

Dept of Uncertain Albedo. 'Her shining hair absorbs all light.' (Joan D. Vinge, *World's End*, 1984)

Eyeballs in the Sky Dept. 'His eyes climbed the tower of rickety scaffolding above him. It rose six stories...' (Dan Brown, *Angels & Demons*, 2000)

Sheepish Metaphor Dept. 'The big destrier liked fire no more than Sandor Clegane had, but the horse was easier to cow.' (George R.R. Martin, *A Clash of Kings*, 1998)

Fashion Dept. 'She indicated the skintight black-spotted orange fur jumpsuit she was wearing, with open circlets on each leg revealing patches of skin up to her arms.' (Alan Dean Foster, *Bloodhype*, 1973)

R.I.P.

Lisa A. Barnett (1958–2006), US fantasy author who published three novels in collaboration with her partner Melissa Scott, died from cancer on 2 May.

Seamus Cullen (1927–2006?), pseudonymous US-born author of the bizarrely erotic *Astra and Flondrix* (1976) and other fantasies, seems to have died. Mail to his Eire address has been returned, stamped 'Deceased'.

Val Guest (1911–2006), UK-born film writer, director and producer responsible for *The Quatermass Xperiment* (1955), *Quatermass II* (1957), *The Abominable Snowman* (1957), and *The Day the Earth Caught Fire* (1961), died on 10 May. He was 94.

Arthur Porges (1915–2006), US maths teacher and author of some 70 short sf/fantasy stories, died on 12 May; he was 90. His best-known stories are 'The Fly' (1952; not the much-filmed George Langelaan story) and 'The Ruum' (1953).

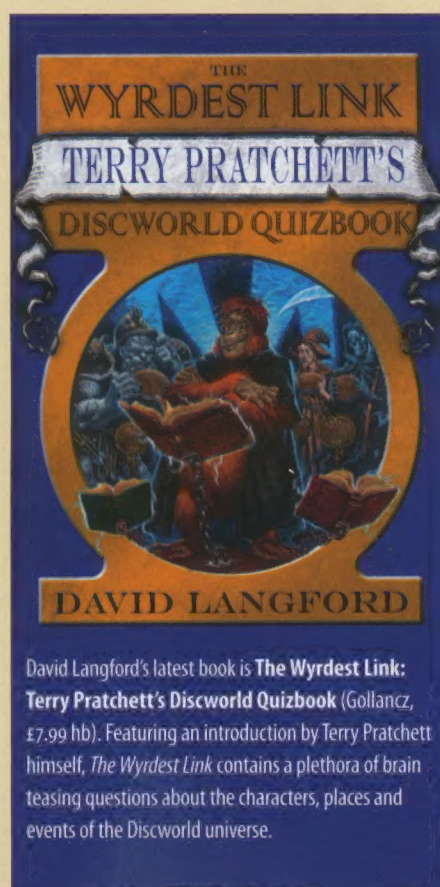
Frankie Thomas (1921–2006), US actor who played the lead in *Tom Corbett: Space Cadet* (TV 1950–55), died on 11 May aged 85. On 16 May, as he'd wanted, he was buried in his Tom Corbett costume.

Alex Toth (1928–2006), influential US comics artist, died at his drawing board on 27 May; he was 77.

Kurt von Trojan (1937–2006), Australian author of *The Transing Syndrome* (1985) and *The Atrocity Shop* (1998), died on 22 March after a very short fight against cancer.

Angus Wells (1943–2006), UK sf/fantasy writer and former book editor, died in a fire at his house on the night of 11 April.

Alexander Zinoviev (1922–2006), Russian philosopher and author whose *The Yawning Heights* (1976) is a fantastical dystopian satire of the old USSR, died from cancer in Moscow on 10 May; he was 83.



David Langford's latest book is *The Wyrdest Link: Terry Pratchett's Discworld Quizbook* (Gollancz, £7.99 hb). Featuring an introduction by Terry Pratchett himself, *The Wyrdest Link* contains a plethora of brain teasing questions about the characters, places and events of the Discworld universe.

My first encounter with the works of Steve Erickson, almost a decade ago, seemed to be guided by something more than chance. I'd read something by Nicholas Royle, praising Erickson's originality, the power of his dreamlike imagery and the precision of his description of the horrors and possibilities of our era. "Must read him," I thought but, typically, within days all I could remember was the surname had sounded Scandinavian. Luckily, the next time I walked into a second-hand bookstore, the first thing that caught my eye was a Futura paperback featuring a deserted cityscape (drawing heavily on De Chirico) with Nazi flags, a boat washed up on an orange tide and a ghostly image of Hitler set against a blazing sky. This was one of the books Royle had been so passionate about – *Tours of the Black Clock* (1989).

And he was spot on: here was a searing examination of the horrors and depravities of the Twentieth Century; a mesmerising blend of bleak comedy, literary meta-fiction, dystopian sf, alternative history, mythology and detective noir. This stylistic alchemy is a defining characteristic of Erickson's work. John Buckley, writing in the *Wall Street Journal*, called Erickson "modern fiction's genius caddy, reaching when necessary for just the right club."

STEVE ECSTASY, CHAOS &



ERICKSON

THE LAST BATTLEGROUND

Erickson's own assessment of his fusion of literary tropes and forms is reassuringly devoid of golfing allusions:

"This is just material that comes naturally to me. Why the genre stuff speaks to me I'm not sure, except I think sometimes there's more psychic truth in melodrama than 'high' culture wants to acknowledge. The surrealism is somehow part of my view of things. This may have something to do with growing up in a landscape – Los Angeles – that naturally bends notions of time and place, because it's entropic and doesn't impose itself the way other cities do. But there's never been any conscious, conceptual intent to blend anything, it came to me naturally."

From Erickson's first published novel, *Days Between Stations* (1985), to his most recent, *Our Ecstatic Days* (2005), Los Angeles, his home city, is repeatedly re-imagined. It's a rich and malleable source of history and mythology for Erickson. I ask if he shares the view of the socialist sociologist Mike Davis who, in the hugely influential *City of Quartz*, suggested the city constituted a prophecy for the future of all cities. Or does LA hold a different kind of fascination for Erickson?

"Mike's LA is very much a sociological laboratory and he does a brilliant job of translating it through the prism of that agenda. I'm sure I have my own agenda, and if I can't really describe what it is, it's not Mike's, although he did an insightful job of writing about my work and how it pertained to LA in his follow-up book, *Ecology of Fear*. Of course the 'real' LA is neither mine nor Mike's. It eludes the cohesive identity of other cities that lend themselves to simpler definitions. I see it as a terrain of possibility and madness. There's no getting around the fact you have a lot of functioning lunatics in LA, and I don't just mean those lying in

the street muttering to themselves, I mean people driving Jaguars and living what other people would consider exceedingly successful glamorous lives, who in fact are entirely off the rails and don't have a clue who they are."

› Promises, betrayals and myth mining

Days Between Stations set out Erickson's stall in terms of style and concern. It's a haunting odyssey through fragmented and colliding time streams, provoked by a mysterious fragment of film, taking readers from a sand-swept, near-future Los Angeles to a post-catastrophe Paris, where the lights are out but bonfires blaze. I ask if these layers of dreamlike consciousness are a product of authorial design, or if his stories demand to be channelled in this form:

"When I start writing the story, none of that stuff is conscious at all. I feel compelled to write it, usually for reasons I don't understand myself – for me they're more visceral than cerebral, and I hope they're more visceral for the reader as well. Otherwise I've failed. At some point, I do step back and begin asking questions, and some of the answers to those questions get incorporated into the work. But the work never becomes about those answers. It remains about the visceral thing the story was born from. A writer writes to find out what it is he or she is thinking – that is, the book is as much a discovery for the writer as for the reader.

"I know I deal in imagery that's primal and subconscious, but none of the things that happen in my stories are a code for anything. When readers find my work difficult, it's because they think they have to decode it. They read reviews that are very flattering

but suggest the work is impossibly daunting. I'm the most literal writer on the face of the planet, and if you just take everything I write at face value and not worry about all the complexities or strategies attached, any one of my novels is easier to understand than any *Harry Potter* book. Compared to anything I've written, the simplest novel by John LeCarre – whom I admire but whose stories my pea-brain finds extraordinarily convoluted – is *Finnegans Wake*."

It was with Erickson's second novel, *Rubicon Beach* (1986), that the theme of America – its history, its mythology, its politics and its collective psyche – started asserting itself in his work. Like some strange brew of Borges, Marquez and Ballard, the story involves a numerological quest; a political dissident under surveillance in a flooded Los Angeles, part of a Balkanized America; and the mysterious odyssey of a modern day siren.

"Since it was founded, America has been about *meaning*. I think *Rubicon Beach* concerns itself with that too."

And the theme continued to develop in *Leap Year* (1989), a searing blend of political campaign diary and fictional myth-mining that put the boot into America's liberal left and conservative right, and *Arc d'X* (1993), a dystopian extravaganza involving alternate history and visionary fantasy. Both *Leap Year* and *Arc d'X* reveal a fascination with eighteenth and nineteenth century American history. Erickson's stories and journalism have been informed by a stark – almost paradoxical – duality of thought about his nation. He's crushingly disappointed by the trajectory of America's recent history but, at the same time, believes it can rediscover just, tolerant and free-thinking approaches to social organisation. So how have these

INTERVIEW by ANDREW HEDGECOCK

competing feelings of hope and despair determined the complexity and ambiguity of Erickson's narratives?

"Rather quaintly, I still find the American Idea thrilling in spite of all the ways we've betrayed it from the beginning. The people who founded the country refused to deal with the issue of slavery, which was an affront to the Idea as obvious as it was horrific. That said, I hope it doesn't sound unduly jingoistic to point out that, for all that's wrong with it, this is still the country that people risk their lives to get into, and that there's enormous pressure to build a wall around it to keep people out, as opposed to countries that spent the last hundred years building walls to keep people in. The Idea is still powerful enough

to represent a promise so electrifying to people that it doesn't seem to matter to them how many times the promise is broken. And from the outset the Promise and Betrayal have been there in the original DNA of the country, a helix – it's what the Civil War was fought for, which really involved a recasting of the country in terms of its meaning. It also says something about the country, on the other hand, that even now relatively educated, enlightened white people in the American South won't acknowledge that that war was about slavery."

« Sexuality has become the last battleground »

› Ism, ism, ism

It's clear from Erickson's interviews and journalism he rejects the whole array of traditional political '-isms'. Over the years he has moved from an independent conservative position to one of almost total scepticism. I ask if this has meant embracing anarchist traditions, and whether this personal journey informs his fiction.

"On a psychological level my most profound impulse *is* anarchic, although my practical and non-violent side rejects that. At some point I realised ideology is by definition intellectually dishonest: it involves the embrace of a single, narrow way of looking at things, and every argument becomes about serving an ideological interest rather than the truth. The Twentieth Century was the century of secular ideology and the Twenty-First is going to be the century of spiritual ideology, which is scarier because the usual checks on human behaviour imposed by a natural survival instinct are no longer operational. There are people out there who don't think twice about the planet and the species going up in flames in the name of some higher religious ideal; people in fact who find something purifying and righteous about that idea. I think this sort of religious chaos manifests itself pretty clearly in some of my novels, including the recent one."

The recent one is *Our Ecstatic Days* (2005), a tale of 'the Age of Chaos'. The story features a lake that appears overnight in the middle of LA, animate buildings that sicken and die, melody snakes consisting entirely of music and a shadowy resistance movement. Kristin, the survivor of a lemming-like ritual sacrifice of women and children portrayed by Erickson in *The Sea Came in at Midnight* (1999), has fled to an abandoned hotel by the mysterious lake. When her three year old son goes missing she sets out on a quest across fractured layers of reality, in one of which she becomes a dominatrix called Lulu. The book's key theme is the increasingly fragile boundary between civilisation and pandemonium. I ask Erickson to what extent the story's strange erasures and chaotic transformations reflect the current battle for the soul of the US and his country's struggle for a new sense of identity:

"On the one hand George Bush is right: Al-Qaeda *are* bad people. When it comes to killing children, I don't care how legitimate the complaints about Western policies in the Middle East might be. Terrorism – and this differentiates it from any other sort of military action, including guerrilla warfare

STEVE ERICKSON

NOVEL

OUR
ECSTATIC
DAYS

NOVEL

STEVE ERICKSON

Our Ecstatic Days is now available in paperback from Simon & Schuster (317pp, £6.99)

– very deliberately targets non-combatants, and insists that no one is innocent, including, you know, my eight-year-old. I supported the American entrance into Afghanistan because the Taliban didn't bother denying its alliance with al-Qaeda and its complicity in 9/11. But now the President is willing to use a justifiable war on terrorism to justify the invasion of a country that had nothing to do with al-Qaeda or 9/11, and that presented no documented threat to the US or the West. In the process we've alienated the world, radicalized whatever is left of moderate Islam, created a new staging ground for terrorism and stretched our capacity for self-defence to a breaking point.

"My revulsion was increased by all the literature that emerged over the last couple of years, showing the government made the decision to go to war first and then constructed a rationale to support it, rather than the other way around. The second big problem is a Christian theocratic impulse, growing in the United States for the last twenty years – an impulse that's not only un-American but, along with our action in Iraq, robs us of moral authority in any battle against religious extremism. The American Right has done a brilliant job of hijacking the *meaning* of the country, and those on the Left or even in the reasonable centre have acquiesced."

« We live in a time when the artistic depiction of the most mortifying violence is more socially and morally acceptable than the depiction of sexuality; when a guy torturing and killing a woman in a movie is more acceptable than any slightly explicit depiction of sexual interaction between them. As is the wont of my country to polarize every discussion, the discussion of sex is dominated by people who see no middle ground between reckless promiscuity on the one hand and repressive abstinence on the other »

› Deeply strange and perverse

"This has had a bearing on several novels, particularly *Arc d'X* and *Our Ecstatic Days*. As well, the collapse of the Berlin Wall certainly played a part in *Arc d'X*, and any careful reader may note the shadow cast by 9/11 on *Our Ecstatic Days*, though that was something I tried not to be too overt about. In the end, my view of history is essentially anti-Marxist. The Marxist view generally holds that politics and societal dynamics define our individual psychological and emotional lives, whereas I believe that our individual psychological and emotional lives define our society and politics, and that, as one of the characters in *Our Ecstatic Days* says, 'history often unfolds for reasons that don't have anything to do with history'."

Readers will have noted Erickson's fascination with flooding, social breakdown and the polymorphous possibilities of L.A. His other frequently ploughed thematic furrows are amnesia and pornography. The theme of erased, ambiguous and distorted memory recurs throughout his work – most notably in *Days Between Stations* and *Amnesiascope*. I ask why it repeatedly forces its way into his narratives.

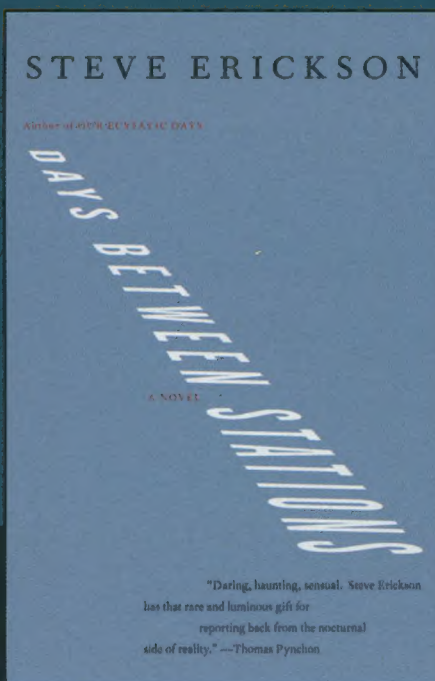
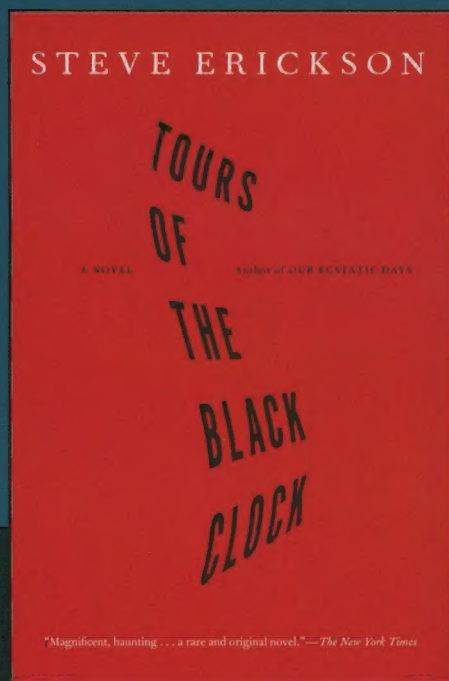
"It may be something as simple as writing *Amnesiascope* in my mid-forties, when I became distinctly aware that I probably

was closer to the end of my life than to the beginning, and when I became distinctly aware how tenuous memory can be. At that point it was a very personal theme, and only over the next few years did it seem to assert itself culturally – suddenly the memoir, or the memoirist novel, is in fashion, and it doesn't seem an accident that it was a fashion borne of the late 90s. I think memoirism, if you will, had a millennial aspect to it. It was the secular version of millennialism, apocalypse on a psychic level rather than a sociological or religious one."

Some of the most unsettling and memorable scenes in Erickson's novels manipulate the tropes of pornography and ritualised spectacle. In books such as *Amnesiascope* and *Tours of the Black Clock* he transform them into symbols of psychic and cultural upheaval.

"Sexuality has become the last battleground. Those of us who came of age in the 60s lived through a brief time when we believed sex didn't have consequences, so when AIDS came along in the early 80s, the idea sex was dangerous felt unnatural, oppressive. Throughout human history, sex has almost always been dangerous – the brief period when it *wasn't* dangerous was aberrational. People used to die of syphilis all the time. Women used to die in childbirth all the time. Then you add the deeply strange and perverse tendency of the species, as represented by religion, to view sex as evil.

"We live in a time when the artistic depiction of the most mortifying violence is more socially and morally acceptable than the depiction of sexuality; when a guy torturing and killing a woman in a movie is more acceptable than any slightly explicit depiction of sexual interaction between them. As is the wont of my country to polarize every discussion, the discussion of sex is dominated by people who see no middle ground between reckless promiscuity on the one hand and repressive abstinence on the other. In the meantime you have interesting things happening in the culture: more and more mainstream movies – the most obvious example being *Eyes Wide Shut* – inch toward a more explicit sexuality. Meanwhile porn directors like Michael Ninn try to incorporate values of legitimate cinema into their work. At this point I don't see that either is succeeding, but it's interesting. I would hope it goes without saying that I'm talking about sexuality between consenting adults as opposed to something like child porn, which obviously is beyond the pale on any level." ■





DAVID MACE

THIS

Stillness. There was clattering chaos, and before that the stunning clap of unbearable sound. Now nothing moves. No bird dares sing. No one stirs from the ducked-down hiding holes and instant shelters and cowering corners in the street, the caught-out cars, the other houses, the entrances and gardens and the tiny park two blocks away. No screams, no shouts, no sirens. No one looks up. Not yet.

» Even the wind holds its breath.

» The world, in this moment of unwanted magic, is suspended.

» One house is erased. Its existence has gone. Next door to it stands an open-sided shell which teeters over a frozen maelstrom of debris – the smashed transfiguration of what was its guts, its innards, its soul. The shell, a scoured skin of masonry and plaster shards, would shiver, wondering whether to fall, if the wind still stirred.

» But the world, in its meaningless vacuum of shock, can't move.

» Until something changes.

HAPPENS

The air above the debris fills with fog. The pulverised architecture cloaks itself. The space beneath the stripped wall turns grey. At first in silence, the air congeals and begins to move. The missing house, the void next door, mushrooms into opacity.

Something happens. The suspended world *un*happens.

Little things spit upwards out of the fog. Fragments of wood, splinters of stone, a roof tile magnificently intact, a whirling parasol made of many sheets of paper – which dance, and twirl, and clump together like congealing shavings of coherent words, until a sheaf of printed white leaps interleaving into the sky.

The fog is denser, swirling, coarser. And noisier. Pattering becomes clattering, becomes a cascade of escalating sounds. A wooden beam, a glazed cup, a stripped and twisting picture frame vomit out of the convulsing dust and arc into the air. A whip-thin snake of electric cable rolls upwards like a flying thing and goes hunting the sky for its torn-free origin. A pulse sucks inwards through the dancing dust and debris. The cloud begins to boil. Secondary crashes crescendo into a scream of integrating pieces and an imploding fountain shoots a severed chunk of brickwork up towards the sky. The brickwork tumbles. It travels sideways. It perches like a perfect acrobat at the end of an inverted dive. It's the top of the chimney which runs like a reinforcing column through that one remaining wall. It's the hacked-off head, which re-embodies itself. Next to it, bricks and mortar fragments snap into place. The wall grows.

Now there's more noise. Much more. It siphons agony out of the ears and stitches it into a boiling symphony of ruin. The place which wasn't there, the house next door which had turned into a rubble beach in a gap-toothed street, is now a roiling body of fragments. This house, which had been stripped to a single wall, becomes a whirling confusion of pieces, and the pieces bump and grow. Glass, brick, stone, concrete, porcelain, shreds of furniture, a flapping carpet, a pan, a torn-out tap, evacuated wardrobe clothes, a shoe, a plant pot with burning bougainvillea still rooted inside – all of it is screeching through the air and clumping, joining, coalescing into *things*.

Recognisable things.

But you didn't see where the doll came from. It's somersaulting through the furious air. It's starting to sing. It's beginning, in patches, to glow. It bounces off a piece of wall that's materialising in the midst of the reinvented upper floor. Now it's burning. It arcs back, faster and faster, towards a space that's clearing itself in the middle of the mess. Something has set the doll on fire. It meets the flame front...

The first house, the empty house, the one that will have vanished by the time that this is done – it blew apart. This second house, its neighbour, was shattered by the blast and by the impacting fragments of the first. It would have fallen, but it didn't get the chance. An explosion isn't simply a concussion. It's also an expulsion of air. Immediately after – immediately *before* in this unhappening – the air slams back. In the snapshot interval between detonation and restoration, there's an underpressure right beside the house. But not inside the house. So its shattered shell, still standing, bursts.

The spool-back of that burst is a miraculous congealing of kaleidoscope into form. The appearance of light-seared shape. A shake, a shudder. A stop –

Suddenly, in the flash-bright brilliance of a next-door sun, the house is there. Its windows are gone. Painted stucco melts off its wall. But it's *there*.

What's unhappening inside?

There are walls. Solid walls, cracked block from standing block by the passage of the shockwave. Dry walls with split joints, expelled nails, and sheeting shivered into layers of separating plasterboard.

There are floors which rip and rend. Ceiling plaster powders the air. Boards whirl like mad Mikado sticks. Stairways – basement to ground, ground to mid-floor, mid to top – hang like exploded working drawings of what the builder once had done. Unswirling in between it all are the homogenised contents of this home.

And the inhabitants.

This one was the grandmother. She's been buried between bricks and tiles and beams. She was bent sideways. She was flattened across her pelvis and her chest, and caked in a carapace of grit glued together with blood. Even an aged grandmother, if suitably crushed, exudes a lot of blood.

Now she's tumbling upwards, slower and slower. Her body is bouncing off bits and pieces, scraping against the re-incorporating house, picking up strips of herself that will have ripped free as she falls. She isn't crushed any more. The gouts of blood that will be expelled as she comes to rest under the roof rubble haven't happened yet. She's sucking back small sprays of red that vanish as each rip and tear heals itself as she flies. She's no longer dead. But she doesn't know what's going on. Excruciating agony and fear, yes – but too much has happened far too suddenly to understand.

Now she's landing on the upper floor, and the floor is prising itself into place beneath her feet. One foot is bare. Here comes the slipper. It's an old Arabian lady's slipper with a brocaded upper rim. It expels the splinter of wood that will have torn it, and the tear zips out of existence. Perfectly, abruptly, it wraps around her reddened toes.

She pirouettes, arms outstretched, baggy trousers and voluminous blouse and damask scarf snapped wide like flags. Her white hair thrashes with a blast of new life. It's the last illusion.

She no longer has time to know it, but at least she isn't alone.

Her daughter, the mother of the house, was in the hall. She was on her way from the kitchen to the study, a bottle of water in her hand. It was half full and laced with freshly squeezed lemon juice – very refreshing on what's going to be another hot day. The family is middle class, though that doesn't mean much these days. It allows them only occasional access to bottled water. Or fresh lemons. The family is also highly educated. Foreign educated. Her husband studied medicine in Tübingen. Mona took law in Manchester, UK.

She was on her way back to the computer, which has been working this morning because the power is on. That doesn't happen often, so you take every chance you can. Mona was updating their files on torture victims lucky enough to be released after inconclusive interrogation by the police. Law and medicine – a combination that compiles a potent condemnation of crimes against humanity. Of course, for years they've had to work in secret on the project, but now the electricity supply has become so unreliable that no one thinks you'd use a computer, and the paper records they assume you'd stash away are far too easy to find. Aside from which, paper's also in short supply. So are little computer disks. But they're remarkably transportable and very easy to smuggle.

Mona was passing the stairs when the parlour wall, against which they're built, exploded. The parlour had somewhat neglected French windows in each gap between its outside piers, and one of the peeling window sets was open to the garden. The open French windows offered no protection. The closed sets weren't much use, either. The blast, together with the pulverised pieces of garden wall that came with it, hit the inner wall with completely unattenuated force. Mona really didn't have time to know. She might have had a momentary memory from just before of something, something... But it didn't last for long.

It's a stair tread that's sliding back out of her waist. Its departure

restores the innards it tore in two. The amazing burst of blood from her ripped open stomach has already sucked itself out of sight. Her neck has uncracked. The banister that broke it is now snapping back on top of its exquisitely carved spindles. Internal wall – a dated, clay brick, load bearing structure – is reforming and expelling the furious storm that's come from the parlour. The staircase is reassembling itself. It mates with the wall and is suddenly fixed in space. Mona's face, at last, has a recognisable expression. She's a middle-aged woman thinking something, going somewhere, doing something.

She's alive.

At this moment, when everything is about to be wiped out, she's thinking briefly of Siham, her mother. The stairs have prompted the passing awareness. Siham took an armful of fresh linen up to the boys' room, on the upper floor. That's a long climb for an ageing lady. Hope she's all right.

Right now, as her own life is about to be ripped to nothing, Mona isn't thinking of her husband, nor her little girl. On reflection, if she was ever going to be given the chance, she'd probably wish she had thought of them. But it's too late now.

Mona's daughter, her youngest child, is Mervet. Or was. She isn't quite back with us yet. Things have to unspool a little further.

The shockwave has already left the house. With it has come its freight of architectural shrapnel. With it, too, travel the ripped limbs of the cracked old date tree that stood for so long, unwatered, in the dry-as-dust garden. Ever since the powers that be took a vicious dislike to the city, mains water has been as fickle and infrequent as the electric power. And groceries, clothes, petrol, Diesel... Once it was a great oil-exporting and refining terminal, the linchpin of the national economy. You wouldn't credit what's been done to this city. And that's before this sudden war.

Tree branches scream themselves against the trunk. Shards of garden wall tumble together and wobble back in line. They create an old shield of whitewashed brick. It wasn't a very good shield. A lot of pulverised house came clean through from next door and the shield became nothing better than a bonus of chisel-sharp bits mixed in with the supersonic murder. It was the shockwave, plus the sheer force of flying pieces, that defeated it. The defeat was lost and done in less than a hundredth of a second. It let through exploding house, the explosion itself, and the flame front.

The doll hasn't met the flame front yet. We've rolled back to a point before the flame has passed through. The doll is intact now. It's squeezing itself into a five-year-old hand, Mervet, the owner of the hand, has barely noticed the disconnection between doll and hand, between hand and arm, nor the thread of brilliant blood erupting in between. Her head is turned to look across her little shoulder. She's heard some sound, noticed that something is about to happen. But it's been far too fast to grasp.

Besides, how does a five-year-old girl grasp this?

Mervet's been playing, dancing with her doll around the garden while there's still some shadow draped across it next to the house. She's been getting thirsty. In a minute she was going to go in for a drink. Granny's in there somewhere, and with luck Granny will find a sweet pistachio pastry, too. Granny makes lovely pistachio pastries.

Mervet isn't an unusual girl. She's bright and beautiful, as little girls always are. She wouldn't normally be alone in the middle

of the morning. She'd be playing with friends, either here in this garden, or in the friend's garden a few houses down the street. But since the sudden war started, the streets – even in this residential zone – have become a lot less safe. Law and order has broken down. She heard Mummy and Daddy say so. It means you mustn't go outside the garden gate alone. Not until someone's taken law and order somewhere and put it right again.

Some people do go out of the gate. Adults. Mervet's father and Mervet's uncle, Mona's brother, have taken the car. With them are the other children – in ascending age, boy, boy, girl. They've risked the use of precious petrol and gone in search of a market that's supposed to have materialised across town. When they get there – if they find it – they have enough numbers to protect the car and at the same time to march through the market buying and carrying. The object of the exercise is food, which they'll buy with devaluating cash and whatever they can bear to barter. They have enough bodies to look after themselves and keep control of their purchases until they get home. The police won't help. Nowadays the police are only concerned with security issues, which means persecuting anyone the governor doesn't like. The governor's been appointed because of his intense dislike of everyone.

Bodies. The food seekers have enough bodies to protect themselves. They'll be back before midday.

They'll find a bomb site. And real bodies, when they dig them out. Mervet, Mona and Siham. Bodies and obliteration. The surviving children, one day, will learn to live despite a vein of horror buried inside. The two men won't.

And they'll always wonder *why*?

The answer's fairly easy. It's the house next door, the empty one that's about to be obliterated in a detonation that will also destroy the home standing right beside it. The emptiness is the problem.

The enemy – the coalition – has received intelligence that the governor is constantly moving from place to place. The intelligence is unverified, but plausible. The advantages to the governor are two-fold. As security forces become stretched and chaos engulfs the city, he's more vulnerable than ever before to an assassination attempt. The locals, after all, hate him. And as a very senior member of the government clique, he's a prime target for the coalition strategy of decapitation. Two reasons for his head to roll.

And an hour ago the general charged with taking the city was told the governor is here. In this empty house. They have a fix on the man. Precise, and hot. So it's decision time. Call in a strike? Yes or no?

The machinery that does it is already here. It's been here for some time, ensuring they've identified the right house. After all, they're very humane and don't want to kill any more innocent bystanders than they have to. It's up there above us now, though you probably wouldn't see it no matter how long you stared into the blinding, sun-dust sky. A remote controlled reconnaissance drone, modified to carry a single bomb and a TV guidance pod, is a tiny thing with whisper jets and the radar profile of a pigeon. And it's five thousand metres away, straight up.

The bomb isn't.

Someone's guiding it. Far away, in a desert-netted mobile home filled with electronic wonders, he's hunched over a TV screen and is tweaking the bomb's steering vanes with his joystick. A colleague

« This one was the grandmother. She's been buried between bricks and tiles and she was bent sideways. She was flattened across her pelvis and her chest, and caked in a carapace of grit glued to her with blood. Even an aged grandmother, if suitably crushed, exudes a lot of blood »

is controlling the drone. Their unit commander cleared them to arm and release the bomb. An officer further up the line cleared the mission and then ordered them to engage the target. Someone else passed it down from the general's office, and the general launched the entire attempt on the basis of the intelligence report, the decapitation strategy, the guidelines from his immediate superiors and, ultimately, the go-ahead for the whole damned thing from his government.

Pity the intelligence is wrong. There's no one hiding in the empty house. It's been unoccupied for months.

Mervet knows that. She doesn't know where the family went. Daddy does. He said liquid—something by the Party agents, and Mummy said nothing at all. Mervet doesn't care. It's an empty house. It might as well have been empty for ever. Its little garden, which she can see over the wall when she leans out of her upstairs window, is an even worse mess than their own. It isn't the least bit interesting.

Though there's some sort of sound, very quiet, that she doesn't recognise from all her eager, busy, fortunate five years. Something that's making her turn with a trace of possible interest to the whitewashed garden wall.

Mona can't hear it. Not consciously. Now, in backwards time, she's just left the kitchen, open bottle in her hand, and is noticing momentarily how the fabric of her clothing sweeps the sweat on her thighs that beaded, unfanned, while she was standing still and pouring the lemon juice into the bottle's neck. Her head is full of thoughts. They jostle and demand, they sweep in and out of her attention. The computer files, the victims, the contents of the larder, the power-starved and useless fridge, the options for the evening meal, the stockpile of bottled water, her husband, her brother, the two boys and their older sister, is the car still working, have they found the market, how does she do anything useful in this ruined, murderous, lawless world, and will her law degree find an application again once the governor is gone and the enemy's taken over, and is there really a risk that the chaos will get even worse and the fundamentalists will move in and a woman's world will shrink back to the prison behind the domestic door? She hopes not. Not for her mother, not for herself, not for her precious little daughter playing outside.

Siham's by the closet in her grandsons' room on the top floor. She's just put the folded linen inside and she's closing the door. Her thoughts, too, are that ceaseless quiet riot of being alive, leavened by the additional experience of years. Some things simply don't matter any more. Other things – her husband, his illness, his death, the fact that he can never brush her cheek, hold her hand, *smile* at her – those things have to be. Newer concerns clamour increasingly in the constant background. Old bones, complaining muscles, inadequate eyes, muffled ears, and that dizziness every time you take too many stairs. But there's her son and her daughter and her son-in-law, and her grandchildren – that headstrong worrisome girl, the proud and splendid men to be, and the little one, the dainty one. Life always goes on. Life, she knows, is good.

And outside, in the air above the neighbouring house, hangs the bomb.

It's falling almost vertically now. We've frozen the fall. It sits motionless in the solid air, suspended on its cross of steering fins. Drab in battle-ordnance sand, it doesn't even glint under the sun. That's a pity. Considering what it's about to do, it almost deserves a moment of impersonal beauty. The power to dispense death, a privilege supposedly reserved to God, is a pretty momentous gift.

The bomb is invested with this power because it was created for that purpose. It's been *made*. Just as someone ordered it, loaded it, sent it, released it and is guiding it, someone else designed it, manufactured

it, shipped it to the war. These weapons are here, with their delivery systems, control systems and the labyrinthine mass of support systems – in fact the whole infernal military machine – because someone does it, someone else has created it, and yet someone else earns money from the providing of it all. It's a very clever economic invention. It distributes the guilt to the point where every individual concerned can claim to be honourable, moral and clean.

It *distributes* the guilt. But doesn't dilute it.

And it doesn't delete the blame.

Every person who's decided that the goal is worth the cost, that duty calls, that the regrettable deaths are a price worth paying – everyone from the soldier guiding the bomb to the politician who sent him – every single one of them is doing this. Right now. To these people. Who are living people. Not collateral damage statistics. Everything they are and were, every potential and hope and expectation they have, their *lives* – it's all about to be extinguished. And it's no excuse to have wrestled with the moral issues, no get-out to insist that you'll answer in the end to God. This isn't a moral issue. It isn't blessed by God. It's death.

It's about to happen. The universe won't tolerate violations of the possible. What occurs stays true. There's no cosmological court of appeal.

Look at this. Look very closely. When someone says it has to be for the benefit of others, and the killing of innocents is justified – these are the ones.

Siham's at the closet door. She's feeling at this moment old, and wobbly, and not as solid as she'd like to be. Mona, back where she leaves the kitchen doorway, feels solid, thoughtlessly corporeal, confident, real. The obscenity of being slashed and ripped simply can't be accommodated within her living mind. Mervet is singing happiness at her doll and is totally unaware that less than a second from now she will have heard *something* – and then will be torn to scorched pieces which fly asunder with everything else in a spray of boiling blood. Right now, every day is five years old and fun. Life is lovely. *Anything* can happen.

And it does.

The suspended bomb moves. The bomb strikes. The warhead explodes. The target building disintegrates. It's transformed in one instant into shockwave and chaos and a maelstrom made of shrapnel and debris, which shred, pulverise, obliterate everything in the path of this God-bright, merciless, momentary hell.

This happens.

And they die.

David Mace: This Happens did actually happen. I don't mean to these people with these names, nor done by the particular unnamed characters who do it. That's all fiction. But it did happen. It's based on two real events, is located right where one of them occurred, and uses a now well-practiced mechanism of slaughter. No prizes for anyone who can spot who amongst us – of whom there are many, including a lot of voters – is responsible for the actual killings.

This Happens is slimmed down. It has a minimum number of innocent victims carefully chosen to, with luck, cut into your heart. Every day and all around us, the real world's innocent victims get cut to pieces. Strange to say, these morally self-justified crimes make me angry. Very angry.

I can't indict the leaders who make the wars, and I'm helpless in the face of the universal soldiers who'll kill you for me, my friend, and me for you. But I won't stay hidden safe in the silent majority. I can write a story. And if it happens to hurt anyone at all, if it changes anyone's mind, it's done its job. Just one of those everyday things that fiction is for.



INTERMISSION

STORIES • THE MEASURE OF ETERNITY by SEAN McMULLEN • ILLUSTRATED by BRUCE RICHARDSON

Majestic amid eastern mountains of the desert was Ubar, city of many towers, city of eight walls, and city of the silver frankincense trees. The like of Ubar had never been known in all the world's history. Its great market was the most prosperous from Yamatai to Londonium, and the rare and exquisitely scented resin of the frankincense trees that grew in the Qara Mountains was traded for gold from Africa, silver mined in Hispania, and emeralds from India. Gemstones so fair that artisans would weep at their beauty were crafted into jewellery bartered for by Chinese merchants and Greek adventurers. The frankincense of Ubar was carried away by camel caravans bigger than entire armies, to be burned by princes at the edge of the world who valued it above its weight in gold. Even the slaves of Ubar lived in more comfort than the nobles of my homeland.

Richest of all in Ubar was the king, who lived in a citadel with four lofty towers, and behind its high, white walls was a garden filled with palms, fruit trees, fountains, and flowers so diverse and exotic that most had no names. Its halls and chambers were hung with tapestries woven from gold thread from Egypt and bright silk from Cathay, while none of the guards that stood by the doors were less than seven feet tall. The king was attended by courtesans from thirty realms, and among them were twins from Gaul with hair as white as milk, and a girl as dark as ebony from Africa who was even taller than the guards. The most beautiful courtesan of all was my mistress, Fiori.

Fiori was the richest and most fair of courtesans. She had a tower of white stone within the king's citadel, whose uppermost gallery looked out over the walls of Ubar and caught the winds from the desert. Within the shade and cooling breezes of this gallery she would gaze across the glittering waters of the irrigation channels and rich farmlands that surrounded Ubar, or watch as vast caravans appeared out of the shimmers on the horizon, the camels thirsting for water after eight days of sun and sand. She would never watch as they departed for the distant port of Moscha, having traded their gold for frankincense, for there was nothing that Fiori desired that lay beyond Ubar. Ubar was the centre of the world, and she was the richest jewel in its crown. Her wealth might have bought an entire city in the empire of the Romans, and the emperor of Cathay could have been ransomed for the worth of the jewels that she wore.

Each evening Fiori would bathe in her tower's bath chamber, with the shutters of its window wide open to all the skies. I would attend her with pitchers of milk, oils and scented waters, massaging creams into her skin after towelling her dry. Few pleasures would delight the king more than to look down from the windows of the highest tower in the citadel and gaze upon her naked beauty. She would smile back at him, her eyes bright with the promise of what would follow the setting of the sun. Although Fiori had reached her forty fifth year, the king looked to her for his delights more often than to any other. Rumours were that she was a ifrit, immortal and blessed with eternal allure, yet although Fiori saw to it that she aged more slowly than others, age she most certainly did.

I reflected Fiori in all respects but one, but for that one talent I had been bought at great cost, indeed my price had been a hundred camels laden with frankincense. I had been in Fiori's service for seven years, and I had to work hard to maintain my worth. From the hours of mid-morning to the first cooling breeze of evening I would go to the middle chamber of Lady Fiori's tower, to a vast room where the windows were hung with white silk. There were no furnishings other than mats upon the floor, and pitchers of water from the vast cistern beneath the city, the great well of Wabar. What I did there was known to myself alone.

When I emerged, Lady Fiori would have me bathed, and rubbed with oils and pastes that delay the onset of wrinkles that blight the skin, for it was her fancy that I should not age any more than her. As I dressed in the black silk trousers and tunic of my calling, Lady

Fiori's chambermaids clad her in the carmine silken trousers of those favoured to be in the king's harem, with her hair braided, her breasts bound in lacework netting of gold thread, her skin painted with henna, and her lips and nails as red as blood from an artery. It was thus that we awaited word from the king that he was in search of enchantment, and more often than any other was Lady Fiori summoned.

On some days, in the cool of the early morning, Fiori would send me into the great market of Ubar, there to barter for fine foods and silks, with her servants and slaves following in my wake. When I returned, Fiori and I would talk within the privacy of the citadel's gardens, the splash and bubble of the fountains masking our words from unseen ears. Here I would tell my mistress of what I had seen and heard, and here I would display what I had bought for her comfort and delight. In the third month of the seventh year of my service with her, however, her mood turned sombre, and try as I might I could do nothing to lift the veil of melancholy from her.

"This day is the first of my forty fifth year," said Fiori as we sat beside the fountain, watching golden fish play in the clear water.

"None in all of Ubar could tell that you were older than twenty five," I replied, sincerity in my heart as well as my words.

"I please the king because I have the experience of so many years, and because I work so very hard. I eat with care, I bathe in milk, I sweat to stay lean, and I send you to learn ever more secrets to delight men from the greatest of the harlots in the houses of dalliance. Even though none but the king has ever known the intimacy of my body, I am better skilled in the arts of pleasing than women who number their bedmates in thousands. Yourself I have to thank for that."

"My mistress is too kind."

"Nevertheless, I am in my forty fifth year."

"But you are the king's favourite, and you easily outpace your years."

"For how long? Yesterday the lovely Vadarelashi disappeared from the harem, the citadel, Ubar, and all the world. She was but thirty five."

I had known of this, for in the dark of night when people vanish, I dress in my black silk robes and watch shadows from within shadows.

"Those ladies who have ceased to please the king are permitted to please no other man," I said sadly. "There is but one way to ensure that."

"Nobody spoke of Vadarelashi today. She has been sponged from the history of Ubar as surely as if she had been the most lowly of beggars."

"Surely not," I said, although I knew it to be true.

"In my years as a courtesan of the king, I have seen seventy nine of my sisters in pleasure vanish. I remember their names, their faces, everything about them. I have a very good memory."

"Is that why you bought me at such great cost, my lady? Do you intend me to save you when your time to vanish comes?"

"Oh no. I intend to submit to death."

For a moment that lingered to the point of discomfort I sought a suitable reply, but found none. "You must surely jest, Lady Fiori."

"Indeed I do not jest, Mei of Kyushu."

"Life without being in your service seems unthinkable, Lady Fiori. How could you submit to such a fate?"

"Life without being the foremost courtesan of the king of Ubar is unthinkable also, so I make my plans."

"Bleak plans they are, ladyship."

"Then let us talk of brighter things. What wonders did you see in the great market today?"

"I saw a beggar, Lady Fiori."

"A special beggar, Lady Mei?"

"Oh indeed so. For months I have heard him calling out that he has nothing, but I paid him no heed. The great market is the tray upon which people display themselves, as much as their wares, and all try to seem larger than the dimensions of life. *Far from having nothing,*

this man has rags and a bowl, I thought as I looked at him. Although gaunt and unkempt, he was probably not above three decades in age, and could have been made to have considerable allure with the aid of a bath and comb."

"Did he say anything else, other than that he had nothing?"

"Oh indeed. As I watched, a merchant stopped and gazed down at him. I thought that he meant to kick the beggar and send him on his way. Instead he took from his robes a wax tablet, then read aloud in some tongue that I did not know. The beggar traced signs in the dust, and the merchant took a stylus and copied them onto his wax tablet. I watched as the merchant dropped a scrap of bread into the bowl beside the beggar, then hurried away. The beggar ignored his payment, instead he looked to the sky, spread his hands and began to cry out. Presently he called "I have nothing!" in the language of the 'Ad."

"Could he be a holy man?" asked my mistress.

"At first I thought as much. As I watched, a dog stole the scrap of bread from the man's bowl, but he seemed not to notice. I moved closer, so that less of the babble of the market was between us, and I listened all the more closely as he raved. Soon I had heard him call that he had nothing in all seventeen languages that I know to a greater or lesser degree. I could also distinguish at least a dozen and a half more tongues amid his cries, even though I know little of them."

"Perhaps he is a great scholar whose mind has snapped," ventured Fiori. "Perhaps some sorrow that cannot be borne has turned his brain. His must be a sad, sad story."

"Without doubt, but that is not all. While I stood close, an Abyssinian merchant asked him a most complex question about the price of silks in Ubar if a Kushan caravan were to arrive from Cathay later today or early tomorrow. The beggar answered with a most specific figure, he said that the median price would drop one part in nine were the caravan to be of a thousand camels."

"The man has the gift of prophecy?" Fiori suggested.

"Perhaps. I asked his name in the language of the 'Ad. Spreading his hands and staring at the dust on the ground, he replied that he was Gravatian. Gravatian is a name of the western people, I pointed out. He replied that he was from a conquered land within the empire of the Romans. I asked if he were happy, and he said yes, for he had nothing. I asked if there were anything that I might give him. He said that it would touch his heart if I were to take the understanding of nothing from him."

"A lunatic indeed."

"A lunatic? It is hard to tell. Most beggars babble, but this man was calm, and seemed somehow amused. My impression was that he sat upon a vast treasure, yet those all around him in the market who sought riches with every breath they took were unable to see it."

"You say he spoke like a prophet?" asked my mistress. "Might he tell my future?"

"I can but ask, my lady."

As the sun sat bloody on the western horizon, Lady Fiori bathed within sight of the windows of the king's chamber. The king did come to his window, and he smiled to see her, yet he did not gaze upon her beauty for long, neither did he send for her as the sky darkened and the stars shone down with cold, pure beauty that eternity cannot fade.

While Fiori bathed, a caravan of Kushan silk merchants arrived with the last light of day, enticed to hurry through the gathering darkness by the promise and allure of Ubar. On the following morning, as the east was brightening, but before the stars had faded into the blue of day, I hurried to the market, there to enquire of the price of silk at a dozen stalls. Within my mind I derived the median of the prices that I learned, then thought on the figures which the beggar Gravatian had predicted. Silk's price had indeed fallen, and by a value of one part in nine. I returned to my mistress and told her what I had found.

SEAN MCMULLEN: THE MEASURE OF ETERNITY



"So, he is indeed a prophet!" Fiori declared as we sat by the fountain. She was curiously anxious for one so rich and powerful.

"Perhaps not," I replied. "Last night I did long and complex calculations of my own, and the results were quite curious."

"You are a woman, yet you know of mathematics?" exclaimed my mistress.

"I know of much that is not seemly for women to know, ladyship," I replied. "That is why you fetched me here from the very edge of the world. Mathematics is a pleasure that only death may rob from me, and may be enjoyed wherever I be without the knowledge of any other."

"What did mathematics tell you?"

"By taking into account so many factors that my head felt close to bursting, I deduced that the price of silk would fall by one part in nine due to the arrival of last night's caravan from the Kushan principalities."

"A mighty and clever achievement," Lady Fiori declared, for it was true.

"It took me the entire evening. The beggar worked out as much in the time it takes to draw a few breaths."

My mistress frowned, disappointed because the man's talent might be of no use to her. "So, the beggar is no prophet, merely a skilled clerk," she said.

"My lady, I am a skilled clerk. Gravatian is a least a thousandfold faster in his calculations than I am. He is indeed a prophet in the ways of commerce."

"Then why is he so very poor?"

"It is well known that those blessed by the gods with such gifts are also cursed with poverty or madness."

My mistress thought upon this for a long time, then came to her

decision. "Return to the market, Mei, and speak with the beggar Gravatian. Determine what manner of prophecy is his gift, then ask him what you will of my situation."

For a reason that I did not then understand, I was in rare haste as I returned to the great market and sought the beggar Gravatian. Before I reached him, I was in turn sought by a hunter from the mountains to the east. He was

selling snake skins from a pole across his back.

"Lady Mei of the royal citadel, all hail."

"Solandinen, hunter from the wilderness, hail to you."

"Would you buy a fine skin, taken from a proud and deadly snake?"

"That I would, but the price must be fair."

We bartered for a time over the flawless skin of a black snake that was of greater length than my body. Presently a bargain was struck.

"I bring news from high, secret places in the mountains,"

Solandinen whispered as we made our exchange. "What do you think that we hunters find there, Lady Mei?"

"Shrines to forgotten gods?"

"Bones, Lady Mei. Bones of humans. Bones picked clean by vultures. Yesterday I saw vultures circling, and I drove them from human bones that were still red with blood and flesh."

"Was the stature that of a woman?"

"Indeed it was, Lady Mei."

"Did you see any skin?"

"Some remained. It was brown, and shaven clean of hair."

My mood was one of sadness as I reached the beggar Gravatian. This time I did not stand with my arms folded, but went down on one knee beside him. "Gravatian, you have either the rare gift of prophecy or an even more rare gift, the facility to do prodigious mathematical calculations in moments," I declared.

"I have neither, wise and merciful ladyship," answered the beggar. "I have nothing."

"Talk sense!" I snapped. "You must have either of those gifts!"

"Wise but strict mistress, I have nothing."

"That is not so. You have a reputation as a prophet, you have a gift with figures, you have a place in Ubar, and in a curious way, you have power in its commerce."

"Ah, but I have nothing," replied Gravatian, smiling benignly and wagging his finger.

"That is untrue, you have gifts, skills, even your name," I countered.

"They are all things."

"Indeed, but I have nothing. It is a gift from wise and benign gods."

"I do not understand, but perhaps understanding lies at the end of the road to knowledge, not by the wayside. You say that gods gave you nothing, yet they gave you prophecy. Is that what makes you a beggar? Will the gods take back their gift if you bathe, wear silks from Cathay, and drink wine chilled in the mighty cistern below Ubar?"

"No."

"Then why do you not aspire to prosperity?"

"Because in all the world, only I have nothing. That is enough for me."

I thought on his words for a time, looking down into the dust between us while flies buzzed and people hurried past.

"Gravatian, I have thought upon your words with great care. Do you have nothing *in addition* to your rags, your bowl, and your name?"

"Wise and clever ladyship, indeed I do."

I sat back in the dust, my eyes closed and my hands clasped.

"Gravatian, in all of your years of wandering, has anyone ever before asked you that question?"

"They have not my lady."

"Were I to have nothing, would I become a beggar like you?" I now asked.

"Mighty ladyship, your fate might well be to prosper and grow very rich."

Suddenly I smiled and sat forward, lowering my voice and smiling the smile of a conspirator. "Learned Gravatian, are all the others in the great market fools, because they hear your cry that you have nothing, yet do not enquire of its nature?"

Gravatian smiled back. "They are fools indeed, wise and learned ladyship."

"Learned Gravatian, how may I have nothing?"

"To have nothing, you must know its value."

"What is the value of nothing?"

"It is so great that it may encompass all the wealth that ever could be."

"What value is that, learned master?"

"That which nothing deems it to be."

"Will you tell me the figure?"

"I do not know the figure, for it has never been determined, but should that ever happen, I could encompass it with nothing."

"How may you do this?" I asked calmly, even though the meaningless riddles that were the beggar's answers had me almost beyond patience.

"Bring me a handful of walnuts and tell me of camels," was his reply.

I left to fetch walnuts, and these I bartered from a Dacian merchant who spoke only Latin. Gravatian was still in the dust and calling that he had nothing when I returned.

"How many camels arrived out of the desert last night?" he asked.

"There were three dozens of camel tracks, each with as many camels as years in the reign of the king, allied with the noble number altavak."

The beggar dropped eleven of the rare nuts into the dust, then flung two away into the crowd. Children pounced at once, fighting fiercely to possess them, for in Ubar they had the worth of silver coins.

"This does encompass the Kushan merchants' caravan," said Gravatian, with a gesture to the nuts that remained in the dust.

"What name has this number?" I asked. "Is it a great and clever name?"

"It needs no name."

"All numbers must have names, else they have no power."

"Does an assassin need a name in order to kill?"



For a long time I contemplated nine walnuts that lay in the dust, my arms folded, sometimes nodding, sometimes shaking my head, fighting the scholarship and outlook of a lifetime, forcing myself to think as the beggar did. When the concept revealed itself to me, it was like walking out of a dark vault into noontime sunlight. For a time my head spun, and I was beyond words. Now I too had nothing.

"What do you ask, in return for teaching me of nothing?" I finally asked, exhausted by the effort of such fundamental thought, speaking so softly that I scarcely heard my own voice above the babble of those bartering.

"I have your understanding of my words," replied the beggar. "In all the world I have never been granted understanding by any man or woman, monarch or scholar. Thank you, ladyship."

"You have my understanding, yet you may still in all honesty say that you have nothing," I declared, feeling smug beyond telling.

"Ah yes indeed, ladyship. Now you too may say that you have nothing, without a lie passing your lips."

We laughed together at our own very private jest, we laughed so loudly that some of the traders and merchants turned to cast puzzled glances in our direction. I spoke with Gravatian for the rest of the day, and in those hours no king or courtesan knew such happiness, nor could any lovers have shared such closeness. We had nothing, and we had the measure of everything within the world and beyond.

"I have a last question," I said as I made to go. "My mistress is beautiful, rich and powerful, but all that is hers has its source in a single man who prizes her beauty greatly."

"Then in truth your mistress can only be rich and powerful as long as her beauty lasts."

"Could you predict her fate?"

"I am no prophet, ladyship, but I can speak common sense. The beauty of your mistress will fade in time, then her patron will do as he has always done."

When I returned to the citadel I told my mistress what I knew of Vadarelashi's fate. "It only confirms what we already know," I said as we talked within the privacy that the fountains offered.

"How will the king move against me?" she asked. "Will the guards lay hands upon me and bear me away screaming, or will I be poisoned and slipped quietly into a sack to be carried into the mountains and fed to the vultures?"

"Poison seems unlikely, my lady. The hunter did not speak of dead vultures near the bones."

"That does not cheer me."

"Why do you not flee, my lady?" I asked in exasperation. "With a mere handful of your jewels you could become a great noble in any city from Cathay to the Roman Empire."

"But no city from Cathay to Roman Empire has the glory of Ubar. Here I am the queen of courtesans in the richest of cities."

"You are in fear of losing your life."

"But I do *not* fear the loss of my life, Mei of Kyushu. I shall die beautiful. Already I have been a courtesan for three decades, which is three times longer than any other in the harem of the king. The folk of Ubar already say that I am a ifrit, immortal and unchanging, and when I vanish it will be said that some sorcerer has freed the king from my spell and banished me back into the winds."

"Yet you are sad," I insisted.

"I am sad only because all this will soon end for me," she said, gesturing all around at the beauty of the citadel's garden. "Death itself has no terrors."

"It is against all of my training to see you die without need. Flee, now. I shall dress as a man and be your guard."

"If I flee, if I go to the world beyond Ubar, I must still gain the patronage of another great man, even to live in reduced circumstances. I am in the second day of my forty fifth year. How long may my allure last? Great men always want younger women, and I would be cast aside,

then live in decline, fading until I am a crone, alone and forgotten in a strange land. Better to go out bright, glorious, and very, very beautiful."

"If you are not in fear of death, my lady, why employ me? Why did you buy my protection?"

"I did not buy you for protection, Mei of Kyushu. I bought you to live for me, beyond the walls of the citadel. You walk the great market, hunt in the mountains, spy upon the antics of those in houses of pleasure, stalk the dark alleys to find adventure, scale the walls of the rich in search of scandals, and ride across the desert with the wind in your unbound hair, all so that I may be told of it. Do not grieve when I vanish, for I have lived life to the fullest beyond this citadel, by means of all that you have done. None but a woman such as you could have granted me that."

To this I could make no answer, and the waters of the fountain tinkled and bubbled to mask nothing but silence.

"Mei of Kyushu, tell me of the beggar," said my mistress as my silence lengthened. "Is he a prophet?"

"Alas, ladyship, he is a gifted mathematician, but beyond that his gift is nothing," I replied coldly, unwilling to share the secret that only Gravatian and I knew of.

"Alas, he cannot predict my last hour?"

"No more than I could, esteemed ladyship."

"Perhaps it is best that way. Go now, rest in the shade and take your pleasure in thoughts of mathematics."

Thus it was that for another five days I went to the great market of Ubar with the first light of morning, and spent the hours until sunset talking with Gravatian. There I would sit in the dust before him, and we would speak in riddles beyond the comprehension of any other in all of Ubar. There we grew close, for just as no other had taken the trouble to give Gravatian understanding, neither had anyone thought that I might be worthy of sharing what they held most precious. As the sun approached the mighty dunes of the distant desert on the evening of the sixth day, I asked of Gravatian the question that had been within my mind since the first of my words with the learned master.

"Wise and learned Gravatian, why do you live as a beggar? Were you to charge a fair rate for your calculations, you could quickly become rich."

"I live as a beggar so that I may enjoy the irony of having the most valuable idea in all of the world, while all those around me ignore it. All day I shout that I have nothing, and yet all day people bustle around me, too busy to listen in their haste to gather wealth. I find that very amusing."

"But when you die, the idea will die with you."

"It will live on with you, Mei of Kyushu, for the span of your life's remainder. With it, you may calculate whatever takes your fancy, be it the courses of the stars or the facets of a crystal."

I thought upon this for a while, tortured by indecision and dilemma. "But must you live as a beggar?" I asked. "Might it be that you and I could live out our lives together, constructing palaces of numbers, and delighting in what we alone share?"

I now sat in terror of rejection. For the very first time I saw unease on the face of Gravatian. "My lady, before I became a beggar I was only a poor student, then an even more poor wayfarer. I know nothing of the life that you lead, I would be an embarrassment to you."

"I have sat six days in the dust, keeping you company before all Ubar. Do I seem embarrassed? As you have taught me, Gravatian, let me teach you."

That night I did not return to the citadel, but led Gravatian to a luxurious house of pleasure where I bathed him, pared and cleaned his nails, scoured the foulness from his teeth, and combed the tangles from his hair. For the remainder of the night we kept company in each other's arms, seldom sleeping. I told him that my mistress was soon to dispense with my services, and that I was a passably rich woman in my own right. We made plans to buy a villa on the edge of the farmlands of Ubar, there to build instruments of brass and stone that would measure the paths of the stars and render them into mathematics.

In the glow of first light I sat up beside Gravatian on the bed and reached for my black robes, but my lover asked me to stay a moment longer. He placed a fig, an olive, a walnut, and ten grapes on the bed between us.

"Open your mind, Mei, for I wish to give you something immense and precious. Assign the value of two grapes to the fig and four grapes to the olive, and they become symbols. Can you do that?"

"I believe so."

"Assign the worth of the fig and the olive to the walnut."

I counted out six grapes, but slowly, for I was anxious for his approval and afraid of failure.

"Give the olive the value of six grapes, then give me their worth."

This time I counted eight grapes.

"Symbols are powerful, for they liberate the mind from the mundane and petty. Now think carefully. Let the walnut be the number of times the value of the fig may be found in the olive, instead of their sum. How many grapes is that?"

Perspiring with the effort of thought, I counted out three grapes.

"How many when the olive has the value of ten grapes?"

I counted five grapes.

"What now, when the fig symbolises but a single grape?"

All ten grapes were needed for my answer.

"Half a grape?"

"I would need twenty grapes to express the value of the walnut, my love," I replied, now more at ease for I had the concept securely.

"And what of when the fig has a value of nothing?"

I considered carefully. Within my mind the pile of grapes grew vast, then covered the world, and even blotted out the heavens themselves.

"The – the figure is beyond my comprehension," I admitted.

"No, the figure is still only the number of times the value of the fig may be found in the value of the olive. Now let the values be of years instead of grapes."

Again I hesitated, but in my mind something grew bright, then brilliant, then a blaze of pure whiteness. "The walnut has the

value of eternity," I breathed in awe.

Gravatian laughed, then cracked open the walnut. "Let us share eternity, my love," he said as he handed me half of the nut's kernel.

With the sun the distance of two fists above the horizon, I roamed the market, buying such robes as might fit and suit Gravatian. Robes that were simple yet dignified, robes that were hardy, and did not stand out in a crowd, robes that suited him, yet robes that elevated him to the station of a sage. As I walked, my feet seemed to be floating above the streets of Ubar, and my heart was elated. I had found my truelove, and we had shared eternity.

At last I returned to the citadel, but as I passed through the gates of blackwood the guards smirked and arched their eyebrows slightly. I had been trained to notice such things, and to know why they are so. Thus it was that I did not go to the bedside of my mistress to rouse her and tell her of my adventures of the heart, but instead retired to my own chamber. There my chests of scented sandalwood had been emptied and their contents scattered, yet nothing was missing. Those who had swept through the chamber in search of scandals during the night had not known what was before their eyes, just as none but I could recognise what Gravatian had been calling when he cried that he had nothing. Then I saw it, brown and battered, tossed onto the deep, soft carpet from the empire of the Persians. It was the bowl of a beggar, abandoned as he was led away by his lover.

For the very first time I learned the true meaning of absolute sorrow.

In the time it takes to draw a dozen breaths I adorned my new belt of black snakeskin with seven metal stars, each the size of my hand's palm, then I walked out with confidence that none expected. As I passed the door to Lady Fiori's chamber, I noted the faint reek of blood, and my sorrow turned to cold fury. Guards sought to lead me to the hall where the king sat waiting on his cushions of Cathay silk, but it was my intent to go nowhere else. As I walked, I thought upon eternity, and of how Gravatian had shared it with me. As my fury became as cold and deadly as the blizzards of my homeland, I resolved to bind our love to eternity itself.

The king of Ubar was sprawled on caramine silk cushions that were heaped upon a blackwood dias. He was wearing rich robes of gold and violet, and was surrounded by his courtesans. For every courtesan there were five guards, and there were fifteen courtesans. On the floor, before the dais, were the heads of Lady Fiori and Gravatian the beggar.

"Why has the Learned Gravatian been put to death?" I demanded.

The king was taken aback, for in all of his life nobody had spoken to him unbidden. He turned to a Persian girl who was sitting beside him, and she fed him a grape.

"Lady Fiori lived a most curious fantasy," said the African guard Porros, who was the captain of the royal guard in the citadel of Ubar. "She sent her handmaid Mei out beyond the citadel, there to roam the great market for pleasure, hunt in the mountains for adventure, and consort with harlots so as to learn how to please the king all the more."

"The Lady Fiori was fond of mysteries," said the guardsman from Cathay, whose name was Wang. "She desired to know where courtesans who had fallen out of favour with the king were taken, and what was their fate."

"The Lady Fiori was unfaithful," said Guardsman Quintus from the Roman Empire. "She bade her handmaid Mei seduce the beggar Gravatian, so that in the most perverse of her fantasies it was Lady Fiori herself who gave her body over to the beggar's pleasure, and thus soiled the honour of the king."

To all of this I made no reply, but glared with cold ferocity at the king, neither bowing nor trembling.

"Mei of Kyushu, the king seeks the amusement of your petition for mercy," prompted Porros.

"Tell the king that in all the world only nothing is truly lasting," I replied. "Tell the king also that Learned Gravatian discovered the nature of nothing, and built a way of counting upon it that was more sharp than a scimitar, more lasting than the greatest palace, and more precious than the all the wealth that has ever been bartered for the frankincense of Ubar. Tell the king that out of love, Gravatian taught me of the nature of nothing, of his way of counting, and even of eternity itself. Tell the king that in ages so far within the future that the most lowly of their beggars will be better remembered than the greatest of Ubar's monarchs, the love between the Learned Gravatian and Mei of the Nightmare Guards of Yamatai will live on, because nothing will be the very foundation of counting, and counting is mightier than kings, and more lasting."

The king frowned.

"The king was not amused by your petition," declared Porros, but words were no longer of interest to me as I began to fling my stars.

The first of my shuriken, my fanged metal stars, struck the king in the kneecap, lodging in the bone, rendering him lame, and causing him such pain that he had not hitherto known to be possible. My second star struck the king's other knee, so that he could no longer stand, yet neither could he crawl, for that must be done upon one's knees. Porros found himself in the way of my third shuriken, which sank deep into his forehead. Plucking his falling scimitar from the air, I struck the head from Wang, then cut the sword hand from Quintus. The courtesans screamed and fled, but although the king also screamed, such were the injuries I had inflicted upon him that he was unable to do more than lie on his back while I cut down his guardsmen. The guards were splendidly armed, and so well oiled and muscled as to be living works



of art, yet as warriors they were but indifferent. In all I slew in excess of five dozen guardsmen before those still living grew afraid and fled, abandoning their scimitars with jewelled handles and inlaid blades.

It was now that I strode after the king, who had crawled but a small distance on his back. I stood over him, placing a foot upon his neck and pressing the blade of my scimitar against his genitals.

"Spare me, and I shall give you wealth so vast that it cannot be counted!" he cried, beseeching my mercy with hands red from his own blood.

"By the mathematics of Gravatian I can count *anything*," I replied grimly.

"But I shall give you whatever is your wish."

"Then give me back Gravatian, alive."

"Alas, I cannot."

"Then for the rest of your days, think upon this, little king of Ubar. Mei of Kyushu, and of the Nightmare Guards of Yamatai, is abroad in the world, and that same Mei is teaching that in the absence of a counter nothing has value. I shall be doing this out of love for Gravatian, and as long as the powerful nothing is used where merchants barter, artisans measure, philosophers calculate, and clerks record, our love will endure because the use of nothing will endure while you vanish as if you had never existed. Think upon that every day, and do not let the delights of Ubar distract you from that thought."

"I do not understand," quavered the king.

"Sharpness of thought is not a requirement for kings," I said with a sneer. "One day I leave Ubar, but before that day I shall want to see that your royal embalmers have reattached the heads of Learned Gravatian and Lady Fiori to their bodies, clothed them in robes whose cost and beauty will make you weep with despair, then buried them with honour, before all Ubar, in tombs of white marble. Should I not hear that this has been done before I go, I shall return to the citadel, there to strike down every guardsman that I find alive. I shall have with me a knife, a needle, and fine silk thread, and I shall slice open your abdomen and sew your bowels into your lips. Then, for the hours or days that remain of your life, I shall watch as you try to sustain yourself upon your own excrement."

Leaving the king to contemplate such a fate and surrounded by scores of dead guardsmen, I returned to my chamber, changed into the robes that I had bought for Gravatian, and vanished. Even in the bright sunlight of morning, I easily melted into the crowds of the marketplace of Ubar, for such are the skills of those trained in the way of shadows and nightmares. Before two days were past, Gravatian and Fiori were buried in tombs of white marble, one intended for the present king, and one from which the body of his father had been ejected in haste. Dressed in silks and paraded on litters before all Ubar, Gravatian and Fiori were honoured and mourned by all before they were buried.

Within that very hour I was in the farmlands to the east of Ubar, and was amid the mountains as the sun coloured the clouds of the western horizon orange. Mounted upon one of the finest horses from the citadel, I travelled east by secret and dangerous paths, and fourteen days after the death of Gravatian I boarded a ship in the port of Moscha, on the shores of the great ocean. From here the ship sailed south at first, then into the Red Sea. I crossed the desert to the Nile at Thebes, travelled down the river to Alexandria, then left a scroll detailing the use of nothing in calculations with the great library there. Never again did I return to Ubar, or even speak its name.

Since then I have travelled far, in the guise of a man, speaking with merchants, moneychangers, clerks, scribes, priests, artisans, teachers, astrologers and philosophers about nothing. I have taught the use of nothing to clerks in the markets of Londonium, Gravatian's birthplace near the western edge of the world, then taught it again to learned philosophers in Rome itself. In Lusitania I taught traders to tally their stocks of malachite, vermillion, azurite and carmine more quickly by Gravatian's ways, and in the vineyards of Gaul I taught that the mathematics of nothing might count amphorae of wine with

greater efficiency. In the barbarian kingdoms of the Franks, Teutons and Goths I taught that the depression a walnut makes in the dust is as significant as the value counted by the walnut itself. In the states bordering the Aegean Sea I taught the use of nothing and the symbolic mathematics of my lover to great philosophers. The Learned Diphantes embraced the concepts of Gravatian with the greatest of enthusiasm, to his lasting profit. Those who scoffed at what I taught did not live long.

Returning to the great library at Alexandria, I lodged yet more learned scrolls on the value of nothing, showing how it simplifies counting, and demonstrating the power of symbolic mathematics. I used nothing to show camel traders in Meroe and Abyssinia how they may cheat or avoid being cheated by means of counting quickly with nothing's aid. After marvelling at the greatest waterfalls in all the world, I taught the new way of counting to traders of fish, gold and ivory on the shores of the mighty freshwater sea that flows into the Nile. All my skills as a Nightmare Guard did not allay my terrors as I caught the summer winds and sailed across the great ocean of oblivion to India, where I taught nothing to holy men in caves, rich nobles lounging on silk cushions sewn with mirrors, and smiling merchants with sly eyes who haggled over coppers in the marketplace.

I sailed on, first east, then north. Nobody remembered me amid the wooden towns and palaces of Yamatai in Kyushu, where I taught nothing to clerks who tally bags of rice that the merchant warlords collect as taxes, and I demonstrated that even a humble farmer may know the number of all the grains of rice in a sack by means of nothing. In Cathay I taught more people the use of nothing and symbolic counting than in all the rest of the world combined. Sometimes I was welcomed, because I allowed a single clerk to do the work of ten, yet others drove me away with stones because I allowed common people to see through the fraudulent schemes of those who changed money or sought to cheat them of the true worth of their rice.

From Cathay I travelled west, across freezing deserts, while teaching nothing to camel drivers and silk merchants. I rode through forests in the far north that were so vast that no ocean could rival their extent, and there I taught nothing to those who mined pale green gemstones that were so rare that they had not even been seen in the great market of Ubar. Within another year I was in the lands of the Ostrogoths, on the shores of the Black Sea, teaching how sacks of wheat may be tallied by means of both walnuts and the absence of walnuts. In fifty years I have never ceased to travel, and always, always, I have taught the use of nothing.

Now I am very old, but still I travel and teach. Today, in the Kushite city of Balkh I looked on with satisfaction in the markets as they bartered their Cathay silks for frankincense by the use of counting based on nothing. It was as I stood listening to this that I also heard word of another wonder from a merchant. Ubar had vanished. I had thought it would take centuries for Ubar to decline, yet the year before the desert had swallowed it, and already it had become no more than fading memories. Where the city had once been, the merchant insisted, sand dunes the size of mountains covered the land. The silver frankincense trees in the mountains to the south still yielded their resin, but now there were new markets.

The temptation to stand in triumph upon the sands covering Ubar is strong, but I resist it. To strengthen the spread of nothing all the more, I must travel to Nishapur, Hamadan, Seleucia, and Antioch before the year's end, encouraging its devotees, and discreetly killing those who deride the idea of nothing's value. Gravatian once used nothing to measure eternity, and so bound our love to nothing. Now I have bound nothing to eternity, for love of Gravatian, and even after I die our love will live on, and be everywhere.

Sean sold his first stories in the late 1980s (he has been published in *Interzone* a few times) and has since become one of Australia's top sf/fantasy authors and winner of several prestigious awards. His most recent novels are in The Moonworlds Saga, the latest (Book 3) being *Voidfarer* (Tor, 396pp, \$27.95 hb).

In the River

Jenna Ree screamed as she was dragged into the cold air, a keening, inhuman wail as the oxygenated water poured out of her lungs.

She lashed out with her arms and legs but the strange, pale creatures holding her were too strong. They strapped her to a hard board then carried her away from the rectangular hatch that led back to the warmth and safety of the ship beneath the airlock. Panic struck as the last of the water drained out of her throat.

"Don't fight it. Take long, deep breaths Dr Ree," one of the creatures said. Another, its face framed in brown hair, pushed the first creature aside.

"Jenna? It's me, Val. You have to breathe."

"She can't understand you," the first creature said. "Now step back, Dr Yastrenko. Please. Let us work."

The harsh, clipped sounds meant nothing to her. Only the roaring in her ears seemed real. She tried to beg, but her olfactor no longer functioned. The stark, white light drew to a pinpoint, the edge of her vision a dark ring.

"Valium, now! Get the resuscitator ready."

Something bit her on the throat, but Jenna was beyond caring. She had the vague sensation of her jaws being pried apart and something cold and metallic pushed down her throat. *Let me go home to die* she thought as the light faded. *Why won't they let me go home?*



She swam again in the River, the light soft and blue. Outside the moss covered walls, beyond the scattered viewports, stars burned bright, always moving as the world revolved around its axis. She knew in abstraction the River was a construct, a machine grown to travel the void, an endless stream that flowed from star to star, but the distances seemed impossible. None here had seen Old Home. None would live long enough to ever see it. Jenna felt a wave of sorrow pass over her tongue, the flavor of copper and bitter-fish.

Far below, where the water thickened with krill and fresh salts, the family drifted in languid abandon around a heat vent. Jenna tried to dive down, but couldn't move. One of the people noticed her and broke away. She knew Finder by the mottled patch of green behind her long skull. Slowly, her elegant tentacles fluttering in the rhythm of sadness, the great creature rose into the cooler water above.

"Sister," Jenna breathed in the language of respect. "I think I am ill. I can no longer swim down to meet you."

"Strange sister..." Finder graced her with a clutching arm, a simple brush across her face. Jenna tasted regret, but also joy in the ancient pilot's words. "It is time for you to go home."

"But, I am home."

"No, small one. You must go to your birth home now, above the water."

"There is only death above the water." Jenna repeated the old children's adage she had learned as a hatchling. Or had she? Her thoughts were mottled, a confused, tainted patchwork. Again, Finder brushed her cheek.

"Goodbye, Strange Sister. May your waters be rich."

"No!" Jenna tried to follow the massive creature down, but couldn't. Already, the sweet water grew thin. Cold, she shivered. Nearby, a faint rustling caught her attention and she forced her eyes open. The light was painfully sharp, but from the corner of her vision she saw movement. The creature with the bearded face approached and loomed over her, a length of beige cloth in his hand. He lay the blanket over her chest and smoothed it around her body.

"Welcome back, sleepy head. You don't know how glad I am to see you."

To Jenna's surprise, she understood the man, though the words made little sense. Hesitantly, she tasted the air. A faint chemical trace drifted on it.

"Who are you?" she croaked.

"My name," he said slowly, "is Valeri Yastrenko. I'm your husband."

Her life fell into a new routine. Gone were the lazy mornings, replaced by painful, frustrating bouts of physical therapy. Jenna hated the exercises and the patronizing tone the therapists used, as if she was a damaged hatchling better left to the mercy of a swift death. But none of the indignities she faced in those sessions compared to the hellish hours that waited after the midday break.

"Good afternoon, Dr Ree," said a gaunt woman with pale, lifeless hair. It made her look sickly, as if the flesh was ready to slip from her bones. "How are we today?"

"Why do you call me doctor?" Jenna asked. It was becoming easier to form the clipped words. "Am I a healer?"

"No. You are a teacher."

"What do I teach?"

The pale woman smiled. Frustrated, Jenna repeated the question.

"What do I teach, Dr Emily Markser?"

"Ah, you remembered my name today. Excellent." She patted Jenna's hand. "You are a professor of Abstract Mathematics. You volunteered for the Deep Immersion program because you felt you

might be able to unlock the Tedris numbering system."

"You say the River People's name wrong," Jenna felt a sense of superiority over the pale woman. Even without her olfactor, she suspected she could make herself understood were she to return to the River. Markser and the others, she knew, never could. "Say it more slowly. Theid triss."

"Thed trezz," Markser said, annoyed at the interruption. "Were you able to understand the Thed trezz numbering system?"

"ValeriYastrenko..." Jenna fumbled over the difficult phrase. "He says it is important that I remember how the Theid count."

"Yes. Very important." A bell chimed and Markser rose and crossed the small chamber. Despite the low gravity, the woman swam like a wounded eel. She returned a moment later, a sealed mug in hand. Jenna caught a whiff of the bitter-sweet-hot liquid within. Tea, she remembered. Dr Markser took a hesitant sip. "Until we understand their mathematics, we have no way to unravel their technology. That's why we came out here, to the edge of the solar system. We need to learn how they harvest zero-point energy."

Jenna frowned. Vaguely, she recalled the term and struggled to put it into context. "They call it the Unseen Flow."

Markser froze, her mug halfway to her lips. "You learned how they harness ZPG?"

"Yes." Jenna tried to frame her thoughts, but without her olfactor, without the thousand subtle expressions of taste and smell, she could not describe what she instinctively knew. She tried again, but failed. Cold sweat broke out on her face, and she felt herself become ill. The room seemed to draw in, the light flickering in nauseating pulses. She grabbed the table edge as the spinning sensation worsened. Shaking, unable to control her limbs, her eyes rolled up in their sockets. The light browned as she fell away from the confining chair. As darkness swept over her, she heard Markser yelling.

"Damn it. She's having another seizure."

"Why have you abandoned me?" Jenna cast her plea into the depths, but her words swirled away untasted. Farther below, lit from beneath by the warming vents, the family rested. A few lifted their long faces and sniffed the water, as if perhaps they caught a trace of her, but made no move to rise. Tears ran down Jenna's face and vanished in the eddies. At long last, Finder broke away from the pod and swam in long spirals upward. One of her tentacles dabbed at the wetness beneath Jenna's eyes, and carried the tear down to her broad, lipless mouth.

"Go home, Strange Sister," she said softly. "Go home."

"Jenna?" She forced her eyes open despite the throbbing in her skull. The lights in the little room were too bright, pinpoints surrounded by rainbow clouds. Valeri Yastrenko brushed a loose strand of hair away from her eyes.

"You have to stop scaring me like this," he said. "I am getting too old for these roller coasters of yours."

She understood less than half of what he said, but gathered enough from his tone to fill in the blanks. More and more she realized the key to this flat, often meaningless jargon depended on the listener as much as the speaker. She tried to imitate his smile, but the contortions made her headache worse.

"I was ill?"

"Ill?" Yastrenko gave his shaggy head a quick shake. "You died for almost a minute and a half. They had to use the defib on you."

"I was back in the River. I did not want to leave. I want to go

back to my family." She stared into his deep, gray eyes, then added, "Please."

He looked away, an expression on his face she could not understand. After a moment, he let out a long, slow breath. "Jenna, do you remember what they did to you? The surgeons, I mean, before you went to the Thed triss?" He stumbled over the word, as if perhaps the flavor of it burned his lips. "They implanted a packet of alien nerve tissue in your limbic system, and another in your corpus callosum. It was these strands of tissue that allowed you to interface."

Absently, Jenna freed her arm from beneath the confining blanket and let her fingers roam along her temples. A tiny scar rested above her left ear, the hair around it bristled and short. "The olfactor?"

"Yes." Gently, he pulled her hand away from the scar. "The olfactory node was attached to the interface points. It let you live among them. Let you communicate, maybe even think like they did. But, it is also the reason we had to take you out of the program earlier than expected. The alien tissue is breaking down and is affecting your brain. Dr Markser and I agree we must remove the tissue before the damage becomes permanent."

With a clarity Jenna had not experienced since being cast out of the River she recoiled, shocked at what the man suggested.

"If you do that –" she forced the words out "– I will never be able to return."

"No. You won't." Yastrenko tried to touch her cheeks, but she batted his hand away. To her surprise, she saw tears form at the corner of his eyes. "Jenna, I don't want to lose you again. I want the old you to come back."

"I don't believe," Jenna said, void of any emotion, "she exists anymore."

She was alone.

Among the family she had never sensed this absence of contact. Even when separated, the currents carried their trace. Distance became irrelevant, every thought uttered a part of the common whole. Not until she had been severed from the endless thread that was the River did she truly understand what she had lost. Even her senses seemed diminished, the richness of existence depleted in this dry, sterile world. Slowly, fighting the vertigo, Jenna removed the straps around herself.

The room was mercifully empty. Jenna drifted weightless toward what at first appeared to be a portal into an adjoining chamber. Instead, she was disappointed to discover it was only a reflection. She touched the mirror and frowned.

"Who are you?" Her fingers traced the outline of her face. Among the Theid, appearance meant little. One simply was. Here, everyone not only claimed to be different, but seemed to revel in it. Suddenly, she felt a tearing need to see the stars. Jenna pulled the sliding door aside and floated into the corridor beyond.

Padded walls formed tunnels, branching corridors that cut stark angles seemingly at random. A slight pull told Jenna which way out was, the ship's spin providing a mild gravity. Without current to carry her, Jenna dragged herself along the handrails as she wandered outward.

Her chest began to ache, her breathing irregular and quick as she increased her pace. Once, she passed several humans but said nothing, ignoring their startled expressions as she hurried past. Ahead, yet another corridor waited. Jenna reached the junction but couldn't decide which path to take. Her temples pounded and, exhausted, she closed her eyes.

"Why have you abandoned me?" she whispered, but knew there

would be no reply. Already, the old dreams faded, the River's constant, swirling touch little more than the memory of a memory. Other memories intruded, odd glimpses of another life, a life she had carefully buried. Her hands shook violently as she curled into a tight ball, arms wrapped around her knees. The shaking in her limbs worsened, and she bit down on her lip, hoping the pain might hold back the flood of memories.

"No, no, no..." Jenna fought to stem the flood but couldn't. Her old life blossomed around her, disjointed flashes, bits and pieces of who she was before the surgeons had done their work. She sobbed, hard, wracking convulsions that tore the breath from her lungs. "No! Please, no!"

Darkness stole over her. Disoriented, she vomited. Sour bile burned her nose and throat as the contents of her stomach gushed out. From nowhere, hands closed around her shoulders. She tried to break free but no longer had the strength. From far off, as if she listened from the bottom of an empty shaft, she heard voices.

"Get her prepped for surgery," the voices said. "Those implants are coming out now."

Emptiness claimed her, a wash of dull pain that refused to leave. Jenna tried to move, but her head and shoulders were bound by hard points that dug uncomfortably into her flesh.

"Don't try to sit up." The voice was masculine and thickly accented. Jenna forced her eyes open. The light was dim, the temperature in the room cool and dry. A man stood over her, concern plain in his deep-set eyes. Despite the pain, Jenna smiled.

"Hello, Val."

"Hello, Jen." The man's bearded face split in a pleasant, relieved grin. She hadn't noticed how thick his accent was, or how wonderful his homely features could seem. He held a water bottle to her lips and let her take a short sip from the rigid straw. "Don't struggle, okay? They have you in full restraints until the anesthesia wears off."

"So I gathered." She closed her eyes and let her face go slack. It helped with the throbbing pain in her temples. "The implants are gone?"

"Yes."

"All of them?"

"The surgeons are confident they removed all the alien tissue. If you can trust a machine."

Jenna chuckled at the remark. For a scientist, Valeri Yastrenko was almost pathologically suspicious of robotic medicine. In so many ways he was an old fashioned man, earth-bound and proud of it. Part of his charm. Part of the reason she had fallen in love with him.

"I am so glad to have you back." His hand slipped into hers, his fingers so thick they forced hers apart. "How do you feel?"

"Drained," she said. "Empty. You can't imagine what it's like to be connected to them." She hesitated. Despite the worsening pain, she had to know the answer to the question plaguing her. "Was I able to break their math?"

A long silence filled the room, broken only by the soft, liquid sound of the machinery tending her. She opened her eyes and focused on Yastrenko's face. "What happened?"

"Can we talk about this later?"

"No. Now."

"Jenna," Yastrenko sighed. "You stopped transmitting months ago. If you discovered how to translate their mathematics, you never bothered to tell us."

He bent down and kissed her forehead, the scent of his beard so like an old dog she had loved as a child. More memories rolled over

her, a cascade effect as if the human side of her personality was punishing her for having been suppressed. She tried desperately to think about her time with the aliens, but nothing remained, as if a wall had been erected. A warm, sticky sensation crept through her limbs, no doubt a sedative released in response to her rising frustration. Unable to stay awake, she let herself be carried once more into watery dreams.

When she woke again, the restraints were gone, nothing holding her but blankets and a sleep net. Nearby, someone snored. Jenna risked turning her head. In the corner of the small room, Yastrenko floated like an overgrown infant wrapped in a blanket. She smiled at the thought, but quickly her mood dissolved, her last thoughts swarming out of the drug induced haze. Her time among the Theid triss had been wasted. She felt as if she existed on two planes, entangled particles which could never exist in the same place simultaneously. With a cold certainty, she knew she was losing her memories of the River.

She wondered if the strange, drifting creatures would remember her.

New routines filled Jenna's hours, the day broken into periods of therapy and rest. She went through the motions without enthusiasm. No matter how hard she pretended otherwise, the lost months preyed on her, and more and more she found herself drawn to the tiny observation lounge on the underside of the ship.

She still needed to see the stars.

The air in the narrow chamber was cool, the long window rimmed with creeping tendrils of frost, spent breath and escaped moisture transmuted into ethereal, ever-shifting patterns. Jenna traced the crystalline etchings with a fingernail. Something in the juxtaposition of ice against the unblinking stars called to her, as if the key she sought lay in front of her waiting only to be noticed. Her reflection in the thick glass mocked her, as if a second Jenna Ree floated on the other side of the window.

"Lights, off," she said softly. The room dimmed until nothing remained but a soft blue line marking the exit. Now the stars seemed brilliant, bright gems spilled on an oily pool. From this vantage, far beyond Pluto's orbit, the sun was simply one of billions. It had taken fifteen years from the moment the Theid triss ship had first popped into existence on the edge of the solar system, its beacon a mournful, unchanging wail, for humanity to mount this expedition. Jenna's life had been consumed by the enigmatic message, swallowed up in the attempt to establish contact. So much had passed during the decade and a half. Her courtship with Valeri. The partial decoding of the Theid triss language. The decision to build this ship and the long, four-year climb to reach the enormous alien vessel. Jenna craned her neck until she could see what lay beneath their own hull. A vague, cylindrical shadow blocked the Southern Cross, the water filled starship more than six kilometers in length. Compared to it, their own ship was like a barnacle on a whale's flank.

"Why did you bring us out here?" she whispered.

A faint, octagonal glow, one of the thousands of windows that dotted the alien craft, caught her eye. For a moment, she thought she saw something drift past, the elongated skull and sleek tendrils a vague phantom through the viewport. The Theid triss were so different. How could she even contemplate understanding them? Jenna leaned her forehead against the cold glass, desperate to see more, but the shape had moved on, ever in motion.

Motion.

Stars swirling. Frost crystals on glass, melting and reforming, nothing constant. Jenna felt herself tilting and pressed her arm against the ceiling to quell the vertigo as the avalanche of information struck, the wall breached. It was so simple. Overwhelmed, she pushed away from the dark window and hurried back into the bright corridors. Her mind buzzed with the new understanding, so much raw information she feared it might slip away if she didn't tell someone. She found Yastrenko outside the infirmary and let herself crash into his arms.

"Val," she said triumphantly, "I've found the key."

"The key?" He frowned, then nodded, a brief smile creasing the lines around his eyes. "That is good, Jenna. Very good."

"You don't seem very excited?" Jenna pushed away, deflated by his lack of response. "Don't you get it? I've finally found a way to reconcile our mathematic system with theirs. I've broken the code."

"Good." He kissed her, but his heart didn't seem in it. "I'm glad."

"What the hell is wrong with you? I thought you'd be thrilled? Don't you see, now we can finally get to work understanding their technology."

"Yes..." Yastrenko opened his mouth to say more, but fell silent. Gently, his big hands firm on her shoulders, he pushed her to arms' length until he could look her directly in the eyes. "Jenna, the Theid triss sent a communication a little over two hours ago. They want us to uncouple and move out to a safe distance. They intend to depart within the next three days."

"No." Jenna stared at him, unbelieving. "You can't let them leave. Not now. For god's sake, Val, we have to do something."

"I know." His voice fell until she thought he might burst into tears. "That's why Emily is having an olfactor node implanted."

"Markser?" Jenna's stomach twisted at the thought of the pale, humorless psychologist taking her place as liaison to the River. "You can't be serious? If anyone should go below, it should be me."

Yastrenko stared at her, his eyes unblinking. For one horrible moment, Jenna had the impression that he wished it was her and not Markser about to undergo the dangerous surgery. She recoiled, all too aware that something else lurked in his eyes, a glimpse of betrayal. Guilt. Shame. An acknowledgment. Jenna stared at him, too stunned to speak as what was left of her once stable universe crashed with fractal-like speed into nothingness. She felt a fool for not having seen it earlier. While she was lost in the strange world of the Theid triss, her husband had fallen in love with another woman.

Gravity increased, an off-tangent drag that piled loose objects against the rear corner of her tiny cabin as the Theid triss ship gradually boosted its spin rate. Chilled, Jenna wrapped a blanket around her shoulders as she sat at her work station, numbed by the day's events. She desperately wanted to blink and find the affair had been an illusion, another by-product of her immersion. She had known Emily Markser for years but had never thought of her as a rival. The woman seemed sterile, practically sexless, a pale caricature of cold, Ivy League detachment. How could someone as primal and vibrant as Valeri Yastrenko be attracted to her? Jenna pulled the blanket tighter. What had she done to drive her husband away?

"Stop it," she whispered, scolding herself. "I will not take the blame for this." She welcomed the anger. Nearby, something cracked, like the sound of wood breaking. Jenna stared down at her hand, surprised to see the thin plastic stylus wound between her fingers snapped cleanly in half.

She let the broken pieces fall with lazy ease toward the back corner of the room and stared at the scratch pad flickering quietly on her

desk. Lines of hand-scratched symbols and equations glowed on the little screen, some familiar, some crude approximations of Theid taste-scent-touch charts. She hadn't even realized she was doodling until she recognized her own sweeping, almost sloppy handwriting. Though she still had no proofs, Jenna knew the long chains of numbers would balance. She sighed. "Maybe the bastard should have cheated on me months ago. Then we could have all gone home."

Behind her, someone coughed. Jenna turned slowly and saw Yastrenko waiting outside in the corridor, his hand on the doorsill.

"I just came to gather up my things," he said.

She nodded, but said nothing. Yastrenko slipped past her, found a duffel bag and quickly began stuffing clothing and personal items inside it. Jenna sat at her desk and watched him. Yastrenko pulled a final pair of socks from his locker then drew the string tight around the mesh bag.

"Jenna, I'm sorry," he began, but she cut him off.

"Don't. I don't want your apologies or your damned excuses. Maybe someday, but not right now."

He looked away, unable to meet her eyes. Duffel bag in hand, Yastrenko turned to leave, but stopped as he noticed the numbers on her scratchpad. "These are your theorems?"

Jenna nodded.

"It almost looks like you are describing harmonic vibrations."

"I am." Despite her anger, she couldn't shut out the sense of discovery. "Like everything about the Theid, nothing is absolute. It's no wonder we couldn't understand what they were trying to tell us. We wanted hard numbers. They don't even understand the concept. As a matter of fact, they only have two numbers in their lexicon."

"But, that is impossible." Yastrenko frowned. Jenna pulled the pad around, secretly enjoying his confusion as she traced the jumbled string of glyphs.

"To our way of thinking, yes. But not to theirs. To them, the entire universe is an unending string. For the Theid triss, there are only two numbers, one and not-one. Add one and one together and you don't get two. You get a greater one."

"A greater-one?" He sounded doubtful, but leaned closer and studied the equations. "And that lets them manipulate space-time?"

"Apparently." Jenna shrugged. "I'm not a physicist."

Yastrenko stood, eyes locked on the pad and shook his head in wonder. "It's going to take years for us to reconcile this." He straightened, and suddenly the excitement in his eyes faded, replaced by guilt. "Jenna, I do love you."

"Strange way you have of showing it."

He gathered up his duffel and started once more into the corridor, but turned before he left the cramped chamber.

"I meant to tell you. The flight crew would like you to be in the cockpit when Emily goes below." His voice cracked around her name. "They need you to monitor her transmissions."

"I'll be there," she said, her tone flat. She waited until he was gone, then lay down on her bed and cried herself to sleep.

The cockpit reminded Jenna more of the trading floor of a stock exchange than the control room of a spacecraft. She sat at the small work station one of the environmental engineers had escorted her to and tried to remain as unobtrusive as possible. To keep busy, she ran a third diagnostic check of the equipment linking Markser to the ship. Fast numbers scrolled across the screen, followed by "All systems are operating properly." Satisfied, she leaned back in the padded chair and waited. Across the circular chamber a young man with a thick red beard raised his voice.

"Captain, the Thed trezz just sent a message."

Jenna winced at his horrible mispronunciation. A slender woman with short gray hair hurried across the room and joined him.

"What did they say?" Paula Spolar, the First Shift Pilot asked. Everyone in the control room listened intently as the bearded man read the translation.

"Caution given. Uncouple soon. We choose to leave in next day-cycle."

Jenna frowned. As much as she hated drawing attention to herself, she pulled her way towards the commo desk. "Did they use the Imperative or the Pending tense?" she asked.

"I'm not sure." The man stammered helplessly. "How do you tell the difference?"

"Sorry. I forget most people haven't spent six months living with the Theid triss." Jenna smiled to put him at ease. "Could I have the audio?"

"Sure." The technician leaned back to let Jenna see his work screen. A series of multi-hued spikes danced on the monitor as a low, mournful series of notes washed around them. Jenna shut her eyes and listened. A faint trill at the end of the final stem-verb told her what she needed to know. Even without an olfactor, the message was plain.

"Well?" Spolar stared at her, waiting.

"They're going under thrust," Jenna said. "Probably within the next six hours. They want us to get clear before they engage their drivers."

"We can't let them go," the com-tech said, his frustration plain. "We've barely figured out how to talk to them."

"I don't think we have any choice in the matter," Jenna said quietly. She looked up at the captain. "The Theid triss take a long time to reach a consensus, but once they do, it's all but impossible to change their minds."

Spolar scratched her long, thin nose as she weighed their limited options. After a moment, she pressed the sense pad on the underside of her left wrist. "Air-lock? Proceed with immersion." She seemed to be speaking with ghosts as the transducers in her jaw relayed the message. "Send Ms Markser below, but tell her if she hasn't convinced the aliens to abort within three hours she is to leave without question." To Jenna she added, "You better get to your station. Markser will be going below any minute now."

"All right." Jenna made her way back to her chair and eased into it. The link was still functioning, though Markser's bio-stats had risen dramatically. As much as she hated it, Jenna found herself sympathizing with Emily Markser. Memories of her own immersion came back, the stark, drowning sensation as the liquid filled her lungs, the sensory overload as the olfactor began gathering and emitting information. Jenna watched the monitor carefully. She had been given the luxury of months to train for her time with the Thied and it had still taken days before she adjusted to the aquatic environment. To expect Markser to do it in a matter of hours bordered on folly.

Without prelude, the bio-stats flared. Across the cockpit, the bearded technician called out, "She's in."

Quickly, Jenna split her screen. A watery blue glow filled the left side of the monitor, the video feed sharp. She watched Markser drift downward, feet first, tiny bubbles trailing in her wake. Three long, enormous shapes rose up from the depths to greet her. The nearest of the Theid triss wrapped long tentacles around Markser's legs. Immediately, the others joined the tangled dance. Jenna watched the other half of the screen as Markser's pulse raced, the adrenalin levels dangerously high.

"Stop fighting it," she whispered, as if the woman on the screen could hear her warning. The mainscreen at the front of the room lit up with the same view. A writhing jumble of tentacles all but hid Markser's desperate flailing as the Theid drew her deeper into the River.

"They're attacking her," someone shouted.

"No." Jenna raised her own voice. "It's a welcoming ritual."

She glanced again at Markser's stats. To her dismay, the woman's condition had worsened dramatically. Suddenly, the spiked graphs began to fall. Jenna spun her chair around.

"Captain," she said. "Markser's passed out."

With alarming speed, the image on the screen diminished as Markser continued to sink. The Theid triss cradled her as she drifted downward.

"Get her out of there," Spolar said over her link. "Send in the divers."

"Captain," Jenna stood up. "The Theid might see that as a threat. Right now, they consider Dr Markser a guest. If we try to take her out by force they may very well defend her."

"I'll risk it," Spolar said. "We need to get her out of there before the aliens go under power. Send in the divers."

Two figures appeared on the screen, sleek black shapes in wetsuits, their faces obscured by diving masks. Although the oxygenated fluid in the River was breathable, the emergency crews had opted for traditional diving gear. Moving in formation, the pair swam rapidly toward the core. Jenna held her breath, waiting, watching.

With blinding speed, two of the Theid twisted around and lashed out at the divers. A gasp ran around the control room as onscreen they watched the two humans beaten back. Bits of hoses and torn neoprene drifted in a cloud, along with thin traces of blood. Within seconds, the divers retreated, their naked bodies covered in welts. The Theid triss returned to Markser and escorted her out of camera range. A hard lump tightened in Jenna's stomach. She took a deep breath, then approached Spolar.

"Tell the airlock I'm on my way."

"What are you going to do?" Spolar asked.

"I'm going under." Jenna tried not to let her fear show through. "After that, it depends on the Theid."

By the time she reached the airlock the divers had already been taken to the infirmary. A smeared set of bloodied footprints led away from the sealed floor hatch. It was hot within the chamber but Jenna shivered. The closer she came to the hatchway, the stronger her fears grew. A single technician, the same young woman who had operated the airlock on her own immersion months ago, waited beside the control console.

"Hello doctor," the girl said. "Captain Spolar needs you to call in."

"Thanks." Jenna thumbed the intercom. Spolar's face, distorted by the fish-eye lens, flashed on-screen.

"Dr Ree, FYI, the aliens have broken contact. I don't know if this is a technical problem or a deliberate response to what happened. Are you sure you want to go through with this?"

Jenna hesitated. The last thing, she realized, that she wanted was to return to the alien vessel. Before, armed with the symbiotic implants and the olfactor, she had been able to speak to the Theid in their own drifting, dream-like language. She had become one of them, so much so that she had nearly lost herself. But now, lacking the enhancements, she had no idea if she could even make herself understood. Worse, she feared she might slip back into the Theid

patterns, her sanity sacrificed. She wanted to turn and run, but instead faced the tiny lens.

"If I don't go, who will?"

She began undressing, letting her uniform and shoes drift to the far wall. The gravity had increased noticeably, the spin rate faster as the Theid triss prepped for launch. Behind her, she heard the door leading into the corridor sigh open.

"What in the hell do you think you're doing?"

Yastrenko stood in the doorway, his eyes red. He stepped toward her, but she drew back and crossed her arms over her breasts. Although Yastrenko had seen her naked hundreds of times, suddenly, standing in front of him in her underwear made her skin crawl.

"Markser's unconscious. I don't know if she fainted or if she's having seizures. Either way, she needs to get out before the Theid triss go under power."

"So, you play the hero, eh?" Yastrenko's heavy cheeks darkened. "Is this your way of getting back at me?"

"What?" Jenna gaped at her husband. "This has nothing to do with you. For that matter, it has nothing to do with Markser."

"Really?" Yastrenko snorted. "Then let the rescue teams go after her. Why do you have to throw this in everyone's face, the wounded heroine off to save her rival?"

"I don't have time for this." Angry now, her earlier fear shunted aside, Jenna pulled her bra over her head, then slipped off her panties. To the tech, she said, "Open the lock."

Yastrenko glared at her as the outer door hissed shut. Jenna ignored him, concentrating instead on what she had to do as the air pressure in the little chamber rose. She pinched her nose and blew until her ears popped, then stepped to the hatch in the floor and took hold of the railing above it. Slowly, it slid aside. Water jiggled in the hatch as if a membrane was stretched taut across it.

"Jenna," Yastrenko said, pleading now. "Don't do this. I don't want to lose you again."

She met his eyes, but said nothing. Before she could change her mind, she grasped the rail, stepped into the water and pushed herself down.

The River was warm and thick as amniotic fluid, a comforting envelope. She let herself drift, the hunger for air growing in her lungs until she couldn't stand it any longer. Fighting her instincts, Jenna inhaled. Liquid poured down her throat, filled her airways, bubbled in her nose. She had forgotten how uncomfortable the transition was. Deliberately, she forced the fluid out, then took another breath. The emptiness in her chest abated as oxygen once more entered her bloodstream. She burped as the gas in her stomach gushed out, leaving a foul taste in her mouth then drew another breath and swirled the syrupy water over her tongue. Old, half forgotten flavors teased her. Salt. Copper. A hint of citrus and vinegar. Honey, urine and rust. Every thought the Theid triss uttered drifted around her, a melange of swirling images. She tried to make sense of it, but couldn't. Without the olfactor to translate the faint chemical traces she was deaf. Still drifting, Jenna looked downward toward the softly glowing core.

Far below, a pair of dark shapes rose to meet her. Jenna froze. Every instinct said flee, and it took real effort not to kick back toward the airlock, already little more than a small white square above her. The Theid triss were peaceful by nature but tended to lash out if provoked. It was vital, she knew, to remain calm. She sculled with her fingertips to remain upright in the strong current as the pair of Theid, young hermaphrodites not yet grown to sexual

maturity, arrived. She struggled to remember their names but couldn't.

The nearer of the Theid brushed a tentacle across her face, its skin slick and cool. The long, leathery arm withdrew. The pair of sentries studied her, their black, multi-faceted eyes less than a meter from her own. One of them opened its broad mouth and sang a short, undulating trill. The overpowering taste of something that reminded Jenna of anchovies filled her mouth.

"I'm sorry," Jenna responded in the simple graphic forms the Theid triss used for radio communication. "I can't understand you."

The Theid repeated the phrase, then slowly backed away. Hesitantly, Jenna raised her right arm. When the sentries made no move, she experimented further and raised both arms over her head. Again, the pair did nothing. Jenna took it as a sign that she had passed their test.

"Thank you," she said, her own voice nearly unrecognizable to her. Slowly, she bent at the waist and flipped, ready to swim down and find where they had taken Markser.

A sharp pain bit her heel. Jenna gasped and rolled over. A brown cloud floated around her left foot. The tentacle that had delivered the lash followed her, ready to strike again. The warning was plain. She was not to descend.

"Please. I need to retrieve my friend." Jenna ignored the irony of the phrase. "She is ill. I have to take her home." She pointed at the bluish glow around the heat vent. Her movements more deliberate than before, Jenna twisted again until she faced head down and started to swim.

The water around her exploded. She gasped as lash after lash cut her skin, the tentacles that had earlier kissed her face now a flurry of whips. Unable to escape the onslaught, Jenna curled into a tight ball, wincing as the sentries flailed her unprotected skin. A new scent filled the water around her, her own blood. She felt herself tumbling, carried into the deeper, thicker waters by the River's flow.

"Please, stop!" she shouted, but couldn't remember if she was speaking Theid or English. It didn't matter. The sentries seemed unable, or unwilling, to listen. A strange detachment uncoiled in her as she realized she was about to die.

"Stop."

The word rumbled around her, a great, gushing hiss followed by a burst of acetic acid so strong it burnt the cuts that covered Jenna's back and legs. Abruptly, the storm of tentacles ended. Jenna felt a swirl of cool water around her as the sentries fluttered away. Stunned, she opened her eyes. A third Theid triss, a female fully twice the size of the young sentries, floated level with her, the creature's dark eyes unreadable. Despite her pain, Jenna smiled.

"Finder?"

The old Theid's probing arms reached toward Jenna and gently ran along her back. She seemed concerned at the welts and blood. Speaking slowly, as if to a hatchling, Finder drew closer to Jenna.

"Strange sister," she rumbled. "Why have you come back?"

"My friend is ill," Jenna repeated, hoping she used the correct inflections. "Please. May I see her?"

Finder said nothing. Jenna's heart sank. Without the surgical enhancements, she realized, her words were little more than babble to the people she had once lived among. She drew a deep breath of the thick, salty water, but before she could say anything else, Finder opened her gill slits and released a bitter jet of yellowish fluid. Far below, more Theid triss picked up the scent, the command clear, and as one rose upward and stopped respectfully beneath Finder.

Jenna stared in amazement as she saw Markser cradled in a nest of tentacles. The ancient female touched Jenna on the forehead, then repeated the gesture with Markser.

"Your sister?" Finder trilled.

Jenna looked down at the comatose woman. Markser's face was rigid, her arms and legs twitching as the seizures continued to wrack her nervous system. Jenna looked back at Finder, then touched her forehead. "Yes," she said. "My sister."

Finder fluttered her grasping arms, an acknowledgment. "Sister go home."

The enormous Theid triss released another command, greenish gold in color, and without hesitation, the people below her started upward, bearing Markser toward the airlock. Finder waited until they were alone, then once again touched Jenna's forehead.

"My sister stay?" Finder kept her words simple, but the emotion was plain to Jenna even without an olfactor to interpret. "Go with the River now?"

For a fleeting moment Jenna almost said yes, the thought of traveling among the stars with the Theid triss enticing. She had been happy here once, content to share their long, endless dreams. But, she knew sadly, that time was gone. Her life, wrecked as it might be, lay elsewhere. Reverently, she swam closer to Finder and touched her tapered snout.

"I go home," she said.

Time seemed to fail. Jenna stopped breathing, afraid she might slip back into the Theid patterns that had once devoured her. Slowly, Finder drew a small device from under her torso and held it. Hesitantly, Jenna touched the strange object. Slick, gray ceramic swirled and curved in on itself, an endless twisted loop, as if a nautilus had been inverted then warped into something dangerous and alien. The device vibrated, the water around it warmed. Jenna stared into Finder's dark eyes.

"This is one of your engines," she said.

"You came for this, yes?"

"Yes," Jenna said softly. The massive Theid pressed the device into her hands.

"Sister, be well." Finder gave her a final caress with her grasping arms, then vanished into the swirling water. Jenna started upward. The Theid around the airlock drew back in a wide circle and let her pass. She paused beneath the airlock and took a last look around her, then darted through the square hatch. Strong arms grabbed her and helped her to the deck. She fell to her knees and let the water gush from her airways. Yastrenko looked chagrined as he wrapped a blanket around her shoulders.

"Thank God, you're back," he said. "Are you all right?"

Jenna wiped her face with the blanket and looked around the little chamber. Markser lay on a stretcher, surrounded by medics, a ventilator down her throat. Already, the woman seemed calmer. The device Finder had given her still pulsed in her grip. It seemed heavier out of the water, more energetic, almost alive. Carefully, she passed the device to the technician. Yastrenko stepped closer, but she warned him off with a frown. She wasn't ready to forgive him. Not yet. After everything that had happened, she wasn't sure it even mattered anymore.

"Am I all right?" She struggled to her feet, then calmly said. "No. But I will be."

Justin Stanchfield's fiction has appeared in over eighty publications, including *Boys' Life*, *Cicada* and *Black Gate*. He lives with his wife and two children on a Montana cattle ranch a stone's throw from the Continental Divide.

INTERMISSION

STORIES • 2+2=5 by RUDY RUCKER & TERRY BISSON • ILLUSTRATED by RUDY RUCKER

"I got the idea for this story just as the narrator describes it in the opening paragraphs, that is, from an overheard conversation between two barristas – although in Los Gatos, California, not in Harrods Creek, Kentucky. Harrods Creek is actually the name of the small town near Louisville where my parents initially lived. While I was planning the story, I was walking around the Mission district, and I actually saw '2+2=5' stenciled on the sidewalk. You could say this tale is thought experiment exploring how to actually get to a point where this phrase is literally true."

RUDY RUCKER

2+2=5

Old age is all about killing time. One evening Jack and I walked the quarter mile from our Journey's End retirement complex to the Hump's chain coffee shop in the strip mall, traffic whizzing by, everyone but us with someplace to go.

The shop was just about deserted and a couple of the barrista guys were having a discussion. One was offering the other fifty or even sixty dollars to do something boring. I didn't catch what the boring thing was, so when the second guy came to wipe our table top, I asked him.

"He was wondering if someone paid me, would I count out loud to ten thousand by ones," said the boy, fingering the ring in his nose, which was kind of an exotic accoutrement for Harrods Creek, Kentucky. "But it would be too stupid," he added. He moved across the empty room, straightening chairs.

I did a quick pencil-and-paper calculation while Jack sipped his chamomile tea. I used to be an insurance adjuster, and numbers are my thing. "I figure I could probably count to ten thousand in the course of a day," I told Jack in a bit.

He argued about this, of course – something about holes in the number line – but then he flipped to my point of view and pushed the calculation further, working it in his head. Before they fired him for his nervous breakdown, Jack was a math professor at the University of Louisville. "You could count to ten million in a year," Jack announced after a minute. "And maybe if a person said the words really fast, they could hit a billion before they died. Assuming they started young. Assuming they didn't pay very close attention."

I called over the barrista with the nose-ring and told him the news, but his mind was already on other things. "We're about to close," he said.

"Maybe I should start counting," I told Jack as the boy wandered off. "I could set a Winners World Record. My own taste of immortality."

"Let's see about that," said Jack, hauling out the oversized cell phone he carried in his pants pocket. It was an off-brand model, a Whortleberry that he'd picked out of a sale bin at the Radio Shack in the strip mall near our rest home. He carried it with him all the time, not that anyone ever called him or me, other than telemarketers. Our wives were dead and our kids had moved to the coasts. They couldn't find interesting work in Kentucky. Jack and I had each other, Nurse Amara, and Hector, the fellow who did the dishes and made up our rooms.

"See what?" I asked Jack.

"See if there's a counting-to-highest-number category on the Winners website." Drawing out his smeared, heavy reading glasses he began pecking at the tiny buttons on the fat cell phone. "I get the Web on this sucker, remember, Bert?"

"Fuck computers," I said. "A Java script put me out of my job."

"Like I haven't heard you say that seven hundred times," said Jack. "Loser. Dinosaur. Old fool."

"At least I didn't go crazy and scare my students," I said. "Telling them the world is made of holes. Screwball. Nut. Psycho."

"Four hundred times for that remark," said Jack, prodding the minute keyboard with the tip of his pen. "I wasn't crazy, I was right. The world is like an engine-block gasket, or, no, like a foam. The holes triangulate the universe; they're the tent stakes, as it were, that keep the whole thing from blowing away. And the big secret is – oh, you're not ready yet. Here's Winners." He set the cell phone on the table so that I could see the screen. What I saw was a blurred flickering smudge. "Your glasses," Jack reminded me, not unkindly.

$2+2=5$ will appear in Rudy Rucker's forthcoming story collection *Mad Professor* (Thunder's Mouth, January 2007). Terry Bisson's *Planet of Mystery* is also out next year (PS Publishing).

" $2+2=5$ is entirely the result of Rudy's genius: all I added were the characters, the plot, the setting, the story and a couple of details."

TERRY BISSON



I found my smeared, heavy reading glasses and studied the display. The Winners website was an outgrowth of the old Guinness Book of World Records, the difference being that Winners had far more categories. They made their money by harvesting information about the record holders so they could be targeted with ads.

"Says the Unaided Counting Record is twelve million, three hundred and forty-five thousand, six hundred and seventy-eight," I said, squinting at the tiny screen.

"12,345,678," echoed Jack. "A tidy place to stop. It took the guy nearly two years. Clyde Burns. Says here he's a Buddhist monk in Wichita, Kansas."

"Closing time, gentlemen," said the barrista.

"Okay, okay."

Walking back, we discussed the project some more. Cars whizzing by. Low beige buildings in a parking lot. Dark green pastures and trees. A rustling cornfield.

"The monk counted for two years!" I said. "Two years is a lifetime when you're my age."

"That's the problem with immortality," mused Jack. "You never live long enough to get there."

For breakfast we had a choice: oatmeal or powdered eggs. I chose oatmeal. Jack joined me at my table, stirring his eggs.

He was smiling. "There's a hole in their rules," he said.

"Huh?"

"There's a hole in everything," he explained. "The universe itself can be described as a fractal pattern of holes in non-existence. A temporary but nonetheless..."

"Never mind your crackpot theories about the universe," I said. I had the feeling – or was it a hope? – that he was talking about the Winners website. "What about their rules?"

"You're not required to vocalize the numbers; or even subvocalize. Just count."

"You still have to *think* them," I said. "It'll still take me two years to get to where the mad monk left off."

"Think biocomputation," said Jack. "Think auxiliary processing."

"Huh?"

To make a long story short, which is what old age is all about, when you think about it, which I try not to do, Jack said he could

hook me up to a computer that would speed up my brain cells.

"Neurons are just switches," he said. "Firing or resting: binary. They can interface to a chip. And as long as they're controlling the counting, it's legal under the Winners rules."

I toyed with my oatmeal. "You want me to swallow a chip? Or get an implant?" As usual the oatmeal was lumpy.

"Wait till tonight," said Jack, glancing suspiciously around the dining-room. As if anyone were there but Hector and our deaf, senile peers. "I'll show you tonight."

After an evening of watching the *McNguyen* and the *Pootie Party* shows, I followed Jack to the room we shared at Journey's End. I was apprehensive, but eager to achieve immortality.

"Voilà," he said. He showed me a knit skull cap. It was blue and orange and silver. It was the worst job of knitting I had ever seen, and I told him so.

"One of my University of Louisville honors students made it for me," he said. "An extra credit grab. She had a B and she wanted..."

"Never mind all that," I said. "What does it do?"

"Guess," he said, showing me the cord with the computer jack. "The silver yarn, clumsily woven, I admit, is a dermo-thalamic web which uploads to the processor inside my Whortleberry to speed up your internal computational sequences. If I hadn't pissed away so much time grading homework for all those sections of business math, then maybe I would have been able to productize this and..."

"Never mind that," I said, sensing immortality. "What do I do?"

"Put it on," he said. "Start counting sheep, from one, until you fall asleep. As soon as your consciousness logs off, the Whortleberry's processor kicks in, and the counting accelerates."

"Have you ever tried it?" I said.

"There was no point," he answered. "It's only good for counting by ones. I ended up giving her an A minus, since..."

"Never mind that," I said. "Plug it in. Give it here."

I pulled on the magic beanie and laid down on my bed.

It was tight. "Should I shave my head?"

For once Jack looked confused. "You're bald," he said.

"Oh, yeah." I'd forgotten.

I closed my eyes and started counting sheep. They were jumping a fence, faster and faster. I dreamed I was herding them up a boulder-studded hill.

“Wake up.”
I sat up. The light through the filthy windows told me it was morning.

Jack was standing over me, smiling. “What’s the first thing that comes to mind?” he asked. “Don’t think about it, just say it.”

“Twelve million, three hundred and forty-five thousand, three hundred and twenty-two,” I said. Even though my head was splitting, I counted to the next number. “Twelve million, three hundred and forty-five thousand, three hundred and twenty-three.” 12,345,323 in digits.

“Voilà,” said Jack. “You’re gaining on the monk already. You’ll pass him by breakfast.”

And I did. Jack uploaded the results to the Winners site and we slapped hands. I was now a world record holder.

I ate some powdered eggs. I didn’t even mind that they had lumps like the oatmeal. I was immortal.

But it didn’t last. Nothing does. Isn’t that what old age is all about? After lunch, between the *Casa Hayzooz* and *Brenda Bondage* shows, Jack checked the Winners site and discovered that the monk in Wichita had logged twelve million, three hundred and forty-five thousand, nine hundred and seventy-nine, beating me by almost eighty. 12,345,979.

“That Buddhist bastard,” I said, with grudging respect. “I thought Kansas was a red state.”

“He must have nothing else to do,” said Jack.

“Neither do I!” I closed my eyes and started counting.

When we logged in later that night, after the *McNguyen* show, I was ahead by nine hundred and forty six. I went to bed exhausted, but pleased.

I was immortal again.

Powdered eggs, the breakfast of champions. I was still feeling like a winner when Jack dragged in, late, looking glum.

“Bad news,” he said. He whipped out his Whortleberry and showed me the Winners site. The mad monk was up almost ten grand; he’d reached twelve million three hundred and fifty-four thousand, two hundred and nineteen. 12,354,219.

He must have stayed up all night.

Much as I hated it, I was prepared to wear the cap again. “What if I throw a shit-fit and Nurse Amara sedates me?” I said. “I’ll sleep all day and double my score.”

“I have a better idea,” said Jack. “Look here.”

He showed me another website on his little screen: LifeIsSciFi.com.

“Sci-fi? I hate that crap.”

“Who doesn’t?” said Jack. “But this site’s gonna kick your skull cap into overdrive. The site’s run by a computer science student at a cow college in San Jose.”

“Computers in Mexico? I hate computers.”

“San Jose, California,” said Jack. “Silicon Valley. Computers are your friends. This ultranerd has hacked into Stanford’s fully-coherent nuclear-magnetic-resonant dark-matter-powered Accelerandodrome. An outlaw link to a quantum computer! If we link your cap to that tonight, you’ll climb so far above that monk that he’ll be eating your positronic dust for the rest of his life.”

“What about my brain?” I asked, remembering the headache I’d gotten from counting to twelve million.

“Do you want to be immortal?” he asked. “Or not?”

To make a long story short, and isn’t that what old age is all about, I pulled on the magic beanie and lay down on my bed. I closed my eyes and started counting sheep again. They were jumping the fence

faster and faster, flowing up the mountainside, scaling the cliffs, frisking into the white fluffy clouds. I picked up my dream-colored staff and followed them.

“Wake up.”
I woke up. I sat up.

“Say the first thing that comes into your mind,” Jack said.

I did like the day before, only more so, spewing out a jawbreaking number name that went like this (and I’m sure you don’t mind if I leave out the middle): “Twelve duotrigintillion, three hundred forty-five unotrigintillion, six hundred seventy-eight tritigintillion, ..., three hundred forty-five million, six hundred seventy-eight thousand, nine hundred one.”

Whew. The inside of my skull was cold. I felt a faint, steady wind in my face, the air so very thin. Toothed, inhuman peaks of ice towered above me like the jaws of Death.

“My head,” I whimpered. “I hope I haven’t had a stroke.”

“Never mind that,” said Jack. “You’re at base camp Googol!”

I blinked away the mountains and saw my familiar room. Jack was smiling, no, grinning. There were even more lines in his face than usual. “Huh?”

“Base camp Googol,” he repeated. “On the Matterhorn of math, high above the workaday timberline. The land of perpetual snow.”

“Google? The search engine? What?”

“I’m not talking business, I’m talking math. ‘Googol’ is an old-school math name that a math prof’s nephew invented in 1938. It stands for the number that you write as a 1 followed by a hundred os. Ten duotrigintillion sounds pompous compared to that. You’ll notice that the number you just said is a hundred and one digits long: 12, 345, 678, 901, 234, 567, 890, 123, 456, 789, 012, 345, 678, 901, 234, 567, 890, 123, 456, 789, 012, 345, 678, 901, 234, 567, 890, 123, 456, 789, 012, 345, 678, 901. That’s why I say you’re at base camp Googol. By the way, Bert, I’m impressed you knew how to put all those digits into words.”

“Don’t forget, I’m an insurance adjuster.”

“Were,” said Jack. “Now you’re an immortal. I’ve got a hunch you’ll be ready for my secret pretty soon.”

He logged in and authenticated me on the Winners website, and all day we were riding high. Just before bedtime, right after *Philosophical Psycho*, we checked into the Winners website one more time. I was still the champ. The mad monk was history. Or was he?

“He can count day and night for ten-to-the-ninetieth-power years and he’ll never catch you,” Jack reassured me. “No one will ever catch you. You’re the winner forever.”

“Cool,” I said. “But I cheated. A bunch of machines did it for me. I was asleep.”

“Count a little higher on your own,” said Jack, looking eager. “I’d really like that. Do it, Bert. Leave your footprints in the trackless snows. According to the Winners rules, you can just say that same number again, and then continue from there. On past base camp Googol.”

“Sounds good. Only I forget the number.”

“I’ll write it out for you,” said Jack. He scribbled with his pencil on one of the triangular scraps of paper he always had in his pockets.

So I read the number out loud, and then I said the next one, and the one after that, and then I got into a counting trance for awhile, and then –

“What?” said Jack, who’d been watching me alertly.

“I lost my voice,” I whispered.

Jack poured me a glass of water. “Try again.”

I tried again, but for some reason I couldn't say the next number. "That's enough anyway," I said. "I hiked a good stretch on my own. It really feels like my own personal record now."

"I want you to try and write that very last number down!" insisted Jack, very excited. "You'll see that it's not there!" He handed me his pencil, a yellow #2, made in China.

Just to please him, I tried to write down the number I hadn't been able to say – but, sure enough, when I got to the last digit, the pencil lead broke. "This is stupid," I said. Jack was absolutely thrilled. He handed me his ballpoint. It ran out of ink on the freaking last digit again. "I quit." I tossed the pen aside and shrugged. "What do I care if I count one more step? I'm already immortal. A proud, solitary figure in the endless fields of snow."

"My life in a nutshell," crowed Jack. "Until now."

"Why are you so happy?"

"Because I'm not alone anymore," he said. "You and me, Bert. I'm not crazy. You found a hole!"

"What hole?"

"A hole in the number line. That number you wanted to say – it's not there, I tell you. That's why you couldn't say it or write it down. The number's missing, Bert. And now that you've come across a big missing number, you're gonna be able to notice some of the smaller ones."

"I thought your magic beanie had me count every single number up through base camp Googol."

"It couldn't help but hop over the holes. Like a rock skipping across water. Suppose you start counting backward. I'll jiggle my Whortleberry to be sure it flags the numbers you miss."

"I'm supposed to drag my weary ass all the way home from base camp Googol?" I exclaimed.

"Starting in the foothills is fine," he said. "It's the smaller missing numbers that we're after. Not the Swiss cheese in the peaks." He handed me the magic beanie. "Suppose you count backwards from your previous record. 12,345,893."

"How do you remember these things?"

"Mathematicians don't get senile," he said.

"They just go nuts," I muttered. But I did as I was told. I figured I owed Jack one. I pulled on the beanie, and lay back and closed my eyes, and started counting sheep jumping backward over the fence, tail first...

Ever examined a sheep's tail?

It was a dirty job, but somebody had to do it. The herd milled around me. We flowed across hilltop pastures, down scrub-filled gullies, and into the cornfields outside of town.

"Wake up," said Jack.

I woke up. I sat up.

Jack stuck his Whortleberry under my nose. "Voilà," he said.

"Congratulations," I said. "You found six numbers that don't exist."

Jack shook his head. "Three. Our setup logged the numbers on either side of each missing number, since the non-numbers can't be displayed. You don't see a hole. You just see the stuff around it. The un-hole."

"Right," I said. "Whatever."

We went to breakfast. The oatmeal was lumpy. Were the lumps the un-oatmeal, I wondered, or was the oatmeal the un-lumps?

While I was thinking about all this, Jack made a few phone calls to mathematician friends – in banking, communications, and government. Mathematicians are everywhere. I listened with half an ear; it sounded like Jack was arguing with everyone he talked to. As

usual. After a bit he rang off and summarized the situation for me.

"Those numbers we found missing: they've never been used as ID numbers for bank accounts, phone numbers, web addresses – nothing like that. But nobody cares. My so-called colleagues don't get the point. Instead of wondering why those particular numbers are hard to use, people just skip over them. Nobody wastes time worrying about the missing numbers."

"But you've got the time to waste," I said. "Right?"

"Wrong," said Jack, super-intense. "Wrong that I'm wasting time. I'm ready to tell you my secret. I hope you won't think I'm too far gone."

For a paranoid instant, I saw his eyes as glowing portholes; his head as a vessel with an alien within. But I couldn't shut him out. I had to let him in. Who else did I have? "You can tell me," I said. "We'll still be friends."

"I don't ask to be famous anymore," said Jack with a sigh. "It'll be enough if I can convince just one person. That would be you, Bert. My secret concerns a certain very small number. It's. Not. Fucking. There."

"Never mind all that," I said, feeling uneasy. "I didn't sleep well."

Jack stared down at the tabletop. He squinted his left eye closed and stared one-eyed at his fingertip. "Do this, Bert. There's a hole in your field of vision where the optic nerve connects into the eyeball. But you never see the hole. You see around it." He waggled his hand. "Pick a spot on the tabletop and stare fixedly at it, and move your fingertip from the right side towards the center. At a certain point your fingertip disappears. It's around two o'clock, halfway out to the right edge of your visual field."

I got going on this, and it worked. Hell, I could wedge two whole knuckles into the hole. Funny I'd never noticed this before, a hole right in front of my nose for going on eighty years.

Hector sidled up to our table, checking us out. "All done breakfast, señors?"

"We're fine," I said, staring down at my un-finger. "You can clear the table if you like."

Jack and I wandered onto the patio behind Journey's End and sat down side by side in rocking chairs, gazing out at the cornfield behind our rest home.

"The holes make the world," said Jack. "The world's the figure, the holes are the ground. Phenomenologically speaking, the illusions of space, time, and matter – they all result from the psychic work we perform to avoid noticing the missing numbers."

I was digging this. I felt smart. "What's the lowest hole, do you think?"

Jack beamed at me, happy and sly.

"Four," he said finally. "It's not there. That word, it's only a sound. A belch, a fart, a *flatus vocis*. There is no four."

Somehow I knew he was right. "Four, four, four," I said testing it out. "Four, four, four, four, four."

"Just a sound," repeated Jack. Out in the cornfield, three or maybe five crows were talking to each other. "Caw caw caw," said Jack, echoing them. "God's voice. Around the holes."

"You knew this all along?" I said, savoring his wisdom.

"That's why I told my business-math students that $2+2=5$," said Jack. "And that's why they fired me. You weren't ready to hear me before. But now you are. The holes are everywhere."

We sat there, rocking and smiling, and later we went in to watch TV. It was more fun than usual, knowing the walls and the ceiling and the TV screen weren't really rectangles. They were squashed pentagons maybe, or googolgons, or, hell, nodes in the all-but-endless web of human language.

One thing for sure, nothing is square. ■

STEVEN MILLS



Pamelina H

BLUE GLASS PEBBLES

1. INVASION

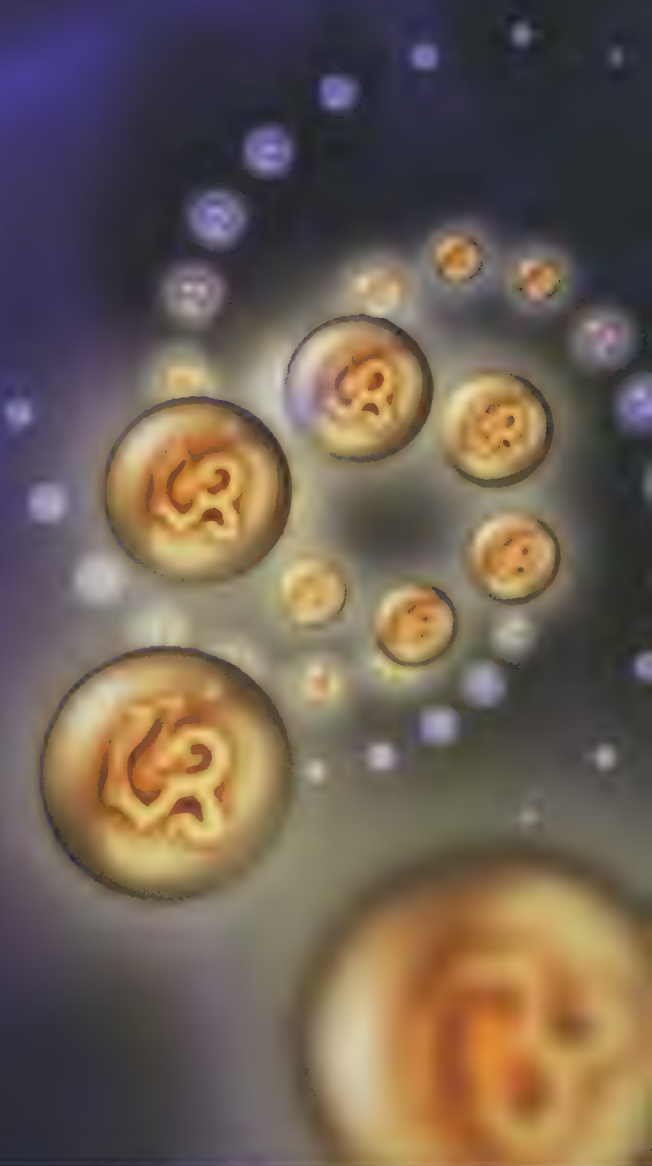
The penetration of Can/Am-UN troops amplified like a filovirus in a host. All the bitching and bartering and begging halted to a halt at 0230 hours when Western Canada's negotiators in Geneva walked, slamming the WTO's metaphorical door on the way out. So the transnationals sent in the dogs. Ian just shook his head. What did his mother expect, that the rest of the goddamn world was *happy* bending over the proverbial rain barrel and taking it up the ass?

JoJo, Ian's mother, perched forward in her spider-chair, squinting at the wall screen mounted in Ian's living room, and as she squinted her eyes seemed to condense, to harden down into glass pebbles. He'd evacuated her from Victoria to his house in New Denver – not far above the 49th parallel, as the crow flies, but tucked tidily beside Slocan Lake across from the foot of the Valhalla Mountains – when news came that the Spirit Bear Warriors (*Spitless Bare-Ass Wienies*, his mother called them) sank two tugs hauling Vivendi water bags from the desalination plant in Prince Rupert. The flap of skin between her eyebrows bulged, giving her permanent frown more ferocity. It's not that her vision was poor; rather, squinting allowed her to imprison the acidic words he knew were multiplying inside her head so that she could simply watch the wall screen and listen.

His mother's rage, palpable in the small house, was suffocating. As they watched the troops roll across the landscape in wave after wave, Ian knew that something was different. That *she* was different. She'd always known that one day scrapping in the conference rooms would fail and their position as a non-military nation would be challenged. She so hated being bullied, though. In that moment, something changed in her, like a door opening, or a jar breaking. He could taste it. The house was filled with the acrid bile of it and his heart quailed.

Sudden recognition slapped him: the downturn of her mouth, the frown, the frost of her eyes; she looked like Dahlia, his daughter. He had lost Dahlia, and now, stunned at the thought, he realized he would lose her, too. He had never really been alone. His mother had always been a phone call or short flight away, and when he'd grown, he'd fallen in love, and when she left, he had Dahlia, tiny, petal soft, Dahlia –

His mother twisted in her spider-chair. "Find Dahlia," she said. She wasn't given to explaining herself. And it was his job, not so much as Dahlia's father, of course, but as one of his mother's personal advisors, to keep track of Dahlia (and a whole host of others, of course). The satellites were his doing, as were the biotronic moles. He never knew where Dahlia was, exactly, but he could always find her.



2. CUSP

Dahlia flew her two-seater Cobb from Bella Coola to the little town of Nakusp, landing softly on what was left of Arrow Lake, as soon as word came that the water tugs had been disabled. She slept in her plane until first light, then wandered up into town hunting for breakfast. Swatches of maryjane green littered the mountain slopes facing the town: hectares and hectares of marijuana filled old logging cut blocks. She ate, then simply waited, drinking tea on a patio tucked in beside a Japanese restaurant, and walking in the community gardens high above the mud flats that had burgeoned over the years as the lake shriveled. The waiting pained her. There would be so little time once her grandmother sent for her. She kept arguing with herself, that she should leave now, get to her father's house as fast as she could, before it was too late.

Her grandmother had told her about the surveillance moles Ian had infected her with, but together they decided to let them live, even though, in those first few years with the Warriors if the moles had been discovered, they'd have executed her. She wouldn't have blamed them, either, not even Nigel, who had still been very much alive back then, not like he was the last time she saw him, beaten in prison until blood filled his skull, pushing his brain aside, starving it of oxygen, so that he sat, unable to feed himself or dress himself or keep from shitting his pants –

She shook away the memory.

The server came out of the restaurant, full of talk about the invasion, and, in case she hadn't heard, a no-fly restriction had been imposed, he said, nodding at her little plane tied to the dock far below them – and asking finally if she were Dahlia, that there was a message for her, that the caller said it was time for her to come home.

Dahlia monitored the invasion on the rental car's dash screen as she drove south as fast as the gutless electric motor would allow her. The fighter jets, flying so low she thought the car was going to be blown off the road, sucked up a wave of paranoia in their wake. What if she were too late and special ops had stormed Ian's house? What if soldiers were already waiting for her on the outskirts of New Denver, to shock-baton her out of the car, shoot her up with tell-all pharmaceuticals, so she'll betray her cell of the Warriors. And her family. She drove on, frustration and fear mixing like corrosives in her chest.

They were so goddamn close. These past three years of negotiating had been fierce, but the tide had really turned once JoJo came on board. Even if their only reception had been patronizing smiles, at least JoJo had wrangled meetings with Ottawa and Washington, the UN, PepsiCo, ExxonMobil, Suez – and, eventually, a host of national and corporate leaders across the globe. Then, finally, just this past January, The Federation of African States had signed, then Euro, India, Pakistan, and Palestine; Brazil wanted in, but hadn't been able to shake off their contract with Vivendi, nor could they find a way out of The Trade Agreement of the Americas. But now, on the very cusp of an agreement with China, this pissant invasion was going to ruin it all. With China, they'd have had a strong enough power block in the UN to make those WTO bastards really pucker.

3. PROMISE

For Saul, valley summers meant gulps of laziness washed down with moderate swallows of gardening, and, in between, the writing of poetry as he sat on his deck overlooking his gardens, the apple orchard beyond, and the anorexic Slokan River far

below. He'd wasted half the summer finishing his memoirs for the collective's end-of-July deadline, spending all his time on stories about the not-so-glamorous glory days. He opened the spigot at the base of the rain barrel that sat up on his deck and snaked the drip hose amongst the tomato plants, then headed to the flower gardens, shears in hand, for his morning constitutional.

Writing his memoirs had taken a scalpel to the scar tissue covering wounds Saul hadn't planned on having to heal again. But memories came, unbidden, on the tail end of some other thought, like a spider hitching a ride on breeze.

The year Western Canada separated, buoyed on a hard-nosed platform of water politics, trade negotiations, and military neutrality: JoJo was Premier, her brilliance edged by bitterness, riding the wave of economic prosperity that – surprisingly – followed.

She had appeared in his living room like an unwelcome epiphany.

"No," he'd said, holding up his hand.

"Hear me out."

"I said no."

But he hadn't walked away, nor had he asked her to leave, so she'd pressed him. "It's possible someone might get tired of paying what we're asking for our water –"

"Really?" he'd said with as much sarcasm as he could muster. JoJo had bastardized the original intentions of the party, as far as he was concerned. When Teth – hurt still squeezed his throat even though seven years had flashed by – when Teth started the separatists rolling, resolving to get water off the stock market as a commodity, to trade it fairly, especially with nations in realistic need, not with greedy, lawn-watering, air-misting neo-conservatives –

"– and decide to use military force to take the water from us," JoJo finished.

Saul had simply sighed, a kind of defeatist release. Maybe she'd never understood, or maybe at some point during the journey JoJo had traded sides. Maybe it was Teth's assassination, or JoJo's own disability two years later at the hand of that neo-fascist prick, that had made her so afraid. And so arrogant. Saul didn't trust her. But still, he was the Jackie O of the media-dubbed Water Party. And JoJo had saved him: got him dried out, paid off the two mortgages he'd put on his property in Appledale when he'd decided to drink himself to death, found him that Schmidt-Cassegrain telescope when he'd asked for it, and best of all, left him alone.

"Can't you just leave me out of it?" Saul had said finally.

"I need you to promise to protect Ian."

He'd laughed at her. "I'm a senior citizen, not a bloody Ninja warrior."

"I know what you are," she'd said. *A drunk, that's what he'd heard. You're nothing but a goddamn drunk who was ready to cry himself to death because his wife got her lungs blown out... until I saved your sorry skin, you self-righteous ass.*

He'd sighed again. "What stupidity are you pursuing now?"

"Oh, just think of it as Moses versus the Pharaoh."

"Don't be melodramatic."

"But melodrama works so well for me," she'd said. "Take Ian into the Valhalla Mountains. There's a cave there, an old silver mine, he knows where it is. It'll be stocked with supplies. Wait there until I come get you."

"The mountains? You want me to go climbing around in the goddamn mountains? I'm seventy years old!"

JoJo had stared at the floor. "Hopefully, it'll never come to that." Then her eyes had come up, as bright as twin planets, and her newly acquired spider-chair raised her to a standing position so that she could look him in the face.

Saul slapped away the memory. The shit never hit the fan. Not enough to send that ball-less waste of skin she called her son to his doorstep. Saul breathed in through his nose, out through his mouth, scolded himself for letting all that ancient crap drive up his blood pressure. He cupped a dead bloom in his gnarled fingers and steadied his shears.

When he dead-headed the first rose off the Climbing White Dawn, though, the whole bush shivered, as if afraid, or cold, or run through by electric current. Then the sound hit like a tsunami, fighter jets howling up the valley in low, tight formation. Saul was almost blown to his knees. With the blossom still clutched in his hand, he rushed indoors, trying to ignore the pain in his hip and automatically kicking off his garden clogs. His heart slapped inside his ribs like a landed fish. He certainly didn't run much anymore, at eighty-nine, and the stupid hip had been deteriorating for almost a year now. He was on the docket for a replacement, but the idea of all those biotronic moles crawling around inside him, rebuilding the joint, made him uncharacteristically squeamish. Maggots, that's how he pictured them, even though he knew better.

He dropped into the chair near the empty river-stone fireplace. Even though it was July, he felt suddenly chilled. He hauled a hemp blanket off the arm of the chair, wrestled it over his legs. He barely watched the wall screen. If Ian were going to come – and he hoped, great goddess, he wouldn't... Then it struck him. Just because, almost twenty years before, JoJo'd said she'd call in that favor if the shit hit the fan, didn't mean she would. But relief escaped him; instead a stubborn terror dripped inside him, spreading a cold puddle of fear.

Genocide is never a simple coffee-table conversation.

4. WATER

Ian opened the door to the wood-burning stove, laid more birch on the fire, and then added the last of the biomemory drives. The living room was like a sauna. And the morning sunshine made it even hotter. He'd destroyed everything his mother had listed: backup drives; biomemory components; p-copies; etherpal memory pins; mole-tracking bioware; the lamprey satellite system programs – everything and anything he could lay his hands on that might enable the invaders to use their own tools against them.

In the kitchen, the only two people he loved, co-conspirators, their heads bent together over the table, the mugs of tea he'd poured forgotten, the plates of food neglected. He watched them dance their verbal dance of negotiation, watched them draw the circle around them tighter, hemming themselves in, keeping him locked out. For all time, now, he was sure.

When we control the water, Ian, we'll control our future, his mother had said to him, probably from before he was born. It was her platform, her argument – and her defense – for everything she did. Joan Arnot, the first premier of Western Canada – ex-premier now. And somewhere in the cascade of media criticism, she got tagged with Joan of Arc iconography, probably because of her apocalyptic rhetoric, and, Ian thought, her florid speeches about commitment and faith and sacrifice.

Forestry? It's a red herring, she'd say, kicking into her speech-making voice. Fishing? A dead end. Mining? Natural gas?

Important, sure, but not important enough. The hemp and marijuana trade? Powerful, lucrative, but ultimately expendable. She'd pause, for effect. But water, *agua fresca*, now, that's the thing. Blue gold, she'd call it, stealing someone else's moniker. We have it; they don't; and if they want it, they can damn well pay through the nose for it. Then she'd grin, and he'd feel dread, like the chill of a fever, flash through his chest.

Ian closed the glass door to the wood stove. His question to her had always been this: But when there is nothing left to bargain with, what then? War? What were we going to fight with? Hunting rifles? He didn't own one. Kitchen knives and rocks? And all she ever said in response was, *It'll never come to that*. But here they were, defenseless, their only bargaining chip, potable water, about to be pried out of their political fingers by the transnationals.

His mother had something up her sleeve, though, and somehow that made him more afraid than the troops raising dust on the wall screen. Her spider-chair tick-ticked her a few centimeters closer to Dahlia, so they could study something on Dahlia's bio-electronic etherpal.

At seventeen, Dahlia had run off to join the Spirit Bear Warriors, fleeing her father's *insouciance* (her word) and the *specious gospel* (her words again) preached by her grandmother's party to be trained in civil disobedience and eco-activism. Ian believed, though, that she was fleeing his mother's control and his own impotence in the face of that control, that her leaving had nothing to do with politics – with public politics, that is – and everything to do with personal power, with who among them was going to win whatever battle she seemed to think they were fighting. Over the years, however, Dahlia and JoJo saw each other, carefully keeping Ian outside their rigid dance of tactical relations, and Dahlia carved herself a place in his mother's soul in a way Ian had been unable to.

He infiltrated Dahlia with surveillance moles the first time she visited after leaving. That was four years ago. He was in a panic. She'd come home – to see her grandmother, truth be told – but was leaving again. He knew of no other way than the moles to keep her somewhat safe. A simple glass of water, which Dahlia drank right there in the kitchen, the moles undetectable. He didn't want to be a voyeur or a spy. There were many things about Dahlia he didn't want to know. Yet, the thought of being unable to rescue her had been too much to bear. She had scoffed at this. "I don't need, or want, to be rescued, Ian," she had said, dangling her legs off the kitchen stool as if she were still a child, sipping the glass of mole-infested water he'd poured for her. He curdled, hating that she called him *Ian* and not *Dad*, slapping him in the face with his incompetence as a father. She was willing to die, she claimed, to save the planet – the water, the trees, the spirit bears, anything not human. She didn't like people much, she insisted, although, as far as Ian could tell, she couldn't seem to live without them, either.

His mother thinks she and Dahlia are alike. In some ways, that's true. Neither of them like to be alone; both are entrenched in an adversarial view of life, both are given to grand visions of the way things *should be*, both believe in the mythology of martyrdom. They will admit to none of this. More specifically, though, his mother isn't much interested in the water itself, or the environment, or the planet. Rather, she's committed to the survival of the human species, a species like any other, granted, with its rightful place in evolution, but a species whose survival is paramount, and, if push came to shove, Ian was

certain, a survival at *all* costs. Dahlia, on the other hand, with her humans-are-vermin outlook, believed humankind's demise might in fact be the only sure way to salvage what was left of Mother Earth's life and dignity. Their core tenets made them odd co-conspirators, their conflicted history even more so.

Ian, however, just wanted peace. And he wasn't going to have it. He could see that plain as day on his mother's face.

They said very little to him. Ian wanted to know why he had to stay behind, why he couldn't go with them, but each time he rehearsed the question in his head he sounded like a whiny ten-year-old.

"Give this to Saul," his mother said, and handed him a plain hemp-paper envelope. It wasn't even sealed. And then she was gone. With Dahlia. They didn't even hug him goodbye. His skin ached with the deficit of touch.

5. PROMISED LAND

Dahlia crawled across the granular skin of the glacier on her belly until her head came up over a ripple in the dirty ice. She propped herself up on her elbows, clamped the binos in place, and waited. Six helicopter gunships shot out over the lake like raptors, thumping northward through the narrow valley to hot-drop troops on the bluff above her father's house. They breached the house in less than a minute.

And nothing happened, no one was home. It must be so anti-climactic for them, she thought wryly as she backtracked down off the glacier. Like when you set a bomb and it doesn't go off – "Where's the kaboom?" Nigel would have said, mimicking some cartoon character whose name he couldn't recall, "There's supposed to be a kaboom!" No getting their military rocks off this time.

She pocketed her binoculars, adjusted the web harness on her pack, and then picked her way up onto the moraine. Her body ached with a familiar fatigue.

Her grandmother, spirited off by the Warriors to a haven in one of the northern towns to wait out the invasion, had acted perfectly weird. Like she was in no hurry to get away; as if it didn't matter whether she was captured or not. "It won't change anything, Dahlia, whether they have me to crucify in person or not." She had shrugged then, as if shaking off some kind of regret. "Never lose faith; never give up hope. No matter how bad things get."

When Dahlia had leaned down to hug her grandmother goodbye, she'd said, "What's going on, Gran? What are you trying to tell me – or not tell me?"

"Tell Ian I'm sorry I sent him away. I'm simply hoping the transnationals will have a harder time capturing you both if you're not together. And besides, they'll be looking for me, not you, anyway. I'm the decoy." She took a breath. "Now listen. There's a mole habitat in the mine. It has a DNA handpad, coded only for you or Ian – any other DNA will initiate a self-destruct. The handpad will give you access to a lock. The combination is on your BEE." She'd held up her hand as Dahlia had started to interrupt. "I already gave Ian the combination."

"What have you done, Gran?"

"Hopefully saved my precious few."

"Gran?" Sudden cold fear had coursed electric through her chest. She knelt beside her grandmother. One of the spider-chair legs twitched away from Dahlia's knee.

JoJo had waved her hand dismissively. "Ingest moles from the habitat within –" she checked her watch – "five days from

now, and you'll be fine. I had always hoped it wouldn't come to this, but it has. I'm counting on you, Dahlia. I'm giving you what we talked about, what you've always believed would be best, because I know you have the strength to see it through to the very end. You are my chosen one, my messiah, you will lead the remnant into the Promised Land." The spider-chair walked her backwards. Suddenly JoJo grinned at Dahlia, winked at her – which was very odd – then said, "See you in the Promised Land," as the chair turned her about and headed out the door.

Dahlia had worried that perhaps dementia had nibbled the edges of her grandmother's mind, or that maybe the stress of the invasion had unhinged a bit of her core. And yet, as she replayed the memory, it seemed that her grandmother's eyes were as crisp as ever, her movements assured and confident, her memory still as precise as a molecular equation.

She trudged along the moraine, kicking the little stones with every step. Her thighs ached with the exertion of the climb. Every so often she thought she heard gunships rising up behind her, so when she actually did, the sound took her by complete surprise. It echoed softly off the ice at first and something in her brain, reptilian and primal, moved her feet. She scrambled down the moraine to the edge of the glacier, hunting for a hiding place. Just ahead, an ice cave carved by a run-off stream. She splashed into the cave, digging out her survival blanket as a matter of course – the lightweight blanket would trap her body heat, hopefully making her invisible to the gunships in case the wing-cover of ice wasn't enough.

The thunder of the helicopters was suddenly deafening, and then they were gone. Clearly they hadn't been searching, only flying over, heading to a new destination. But Dahlia sat on a wet boulder, not moving, breathing sour fear under her blanket.

6. CALYX

Hard rap on wood, then another. Saul's eyes flew open. The wall screen showed Ian standing on Saul's back deck, knocking on the wooden door.

"It's open!" he yelled and signed off the screen. He still clutched the dead rose in his hand. He got up and shuffled into the kitchen and tossed the dead bloom in the compost bucket, then slipped a bottle of homemade elderberry wine off his rack. He'd rather be drinking Glenfiddich at a time like this, but his scotch days were long gone. The pottery chalice rested upside down in the dish rack. He righted it onto the counter. A gift from Teth – long, long ago – bought from a local potter, the cup covered in a relief of leaves, a calyx, while the stem, like the stem of a flower descended into a rumpled base that looked like garden soil. It was quite ugly, really, but Saul treasured it anyway, all the more because Teth thought it handsome, which made him smile still, even sixty years later.

"Wine?" he asked as Ian closed the door behind him with a palpable discomfort.

Ian shook his head, but Saul poured him one anyway, taking another pottery goblet from the cupboard. Ian took the cup and stood with both his hands clenched around its bowl.

"Good to see you, Saul," he said, his voice shaking ever so slightly.

"It's been a while," Saul said. "Have a seat." He motioned to the futon couch across from the fireplace.

Ian eased onto the old futon, tried to get comfortable. "You heard about the invasion?"

Saul sneered. He couldn't help himself. "I'm a poet, not a

Luddite. Of course I heard. Besides, those goddamn jets nearly knocked me onto my arse."

Silence welled like floodwater into the space between. Ian fidgeted on the futon, picked at lint on his shirt.

"Why are you here, Ian? Did your mother send you to me?"

"She's gone, you know."

"What do you mean, 'gone'? *Dead 'gone'* or *went-somewhere 'gone'*?"

"She and Dahlia." He settled the goblet on the driftwood coffee table. And then, like a ten-year-old kid who can't keep a secret, he blurted: "I think she's gone to join the Warriors."

Saul hadn't considered that option. But it didn't make any sense. She'd fought the Warriors her whole career, and whatever it was she had going with Dahlia had little to do with the Warriors, he was sure of it. Saul studied Ian's soft face, the dark, worried smudges under his eyes, his undersized chin. "Did your mother send you?" he repeated.

Ian nodded, then shrugged. He pulled an envelope out of a back pocket. "Here."

"Read it to me."

"It's a poem."

"Well, poems are supposed to be read out loud."

Ian flattened the paper, cleared his throat.

"The highest good is like water.

Water gives life to the ten thousand things and does not strive.

It flows in places men reject and so is like the Tao.

Fish cannot leave deep waters,

And a country's weapons should not be displayed.

Under heaven nothing is more soft and yielding than water.

Yet for attacking the solid and strong, nothing is better;

It has no equal.

The weak can overcome the strong;

The supple can overcome the stiff.

Under heaven everyone knows this,

Yet no one puts it into practice.

Therefore the sage says:

He who takes upon himself the humiliation of the people is fit to rule them.

He who takes upon himself the country's disasters deserves to be king of the universe.

The truth often sounds paradoxical."

Saul snorted. "Those are passages from the *Tao Te Ching*."

"What do they mean?" Ian sounded panicked, afraid.

"I was kind of hoping you'd know." Dread lapped at the edges of his heart. Saul swallowed, his vision narrowed. JoJo wasn't one for trivialities. She was given to melodrama and sweeping rhetoric, but not to things of inconsequence. When she acted, she acted with purpose and intention.

He who takes upon himself the country's disasters deserves to be king of the universe. The truth often sounds paradoxical.

Saul's heart dropped like a stone in water. "Did she tell you?"

Ian swung his head back and forth, the sunlight from the south windows highlighting the droplets of sweat on his forehead. "She didn't tell me anything. She never does."

"And you haven't figured it out?"

Ian surged to his feet and began to pace the wood floor.

"What the hell are you getting at?"

"The biotronic moles," Saul said.

"Which moles?" Ian sounded suspicious.

Saul picked up his wine. "Now, I'm just guessing here. Well, it's an educated guess, really."

"Oh, for Chrissake," Ian said, flinging himself back onto the futon, "just give me the short version, okay?"

"I remember your mother being very disappointed that you didn't put up much of a fight when you lost your corporate funding at UBC."

"Didn't see that there was much point. Alice Callwell bailed, took everything we'd done on coronary artery repair, and signed on with UCLA."

"And you wouldn't go with her."

"I couldn't leave."

"Yes, your mother was quite disappointed about that, too."

"*Disappointment* is her middle name," Ian said bitterly.

"You and Callwell were evolving moles to target areas in the vessel wall that had weakened, and to –"

"Yes, yes! I ran the whole goddamn lab, remember?"

"Keep your shirt on for two seconds. And that other fellow – shit, what was his name?"

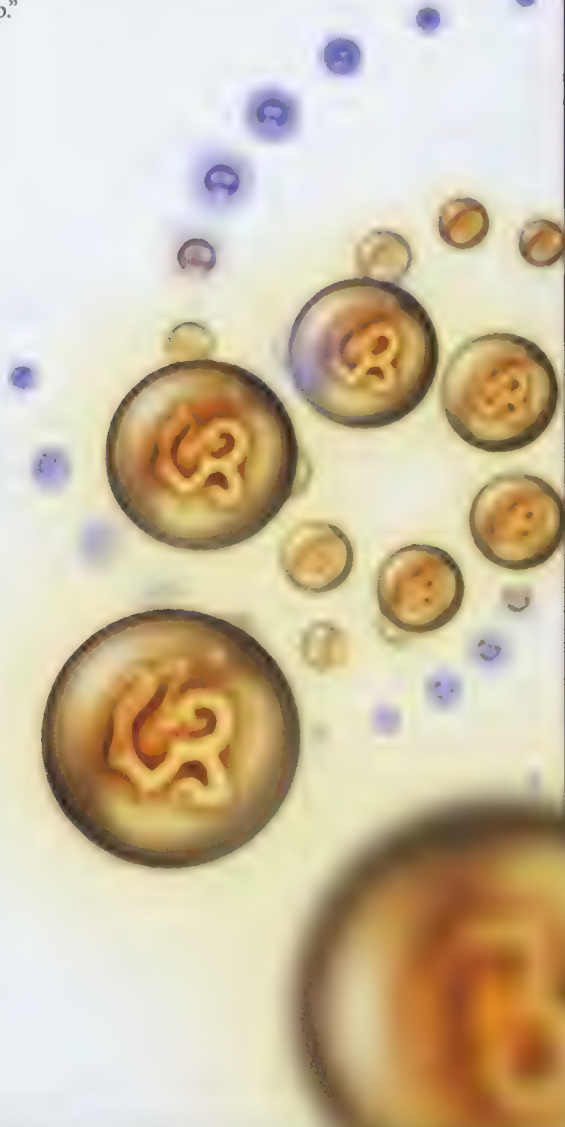
"Greg McFadden."

"Yeah, McFadden. He was crewed up with Del Monk, right, working on moles to defuse the autoimmune response so that the targeting moles could work unhampered."

Ian nodded, although his face had flushed with impatience, or anger. Or maybe it was the wine. Saul wasn't sure.

"Monk was a party member, in hot and heavy with Teth and your mother."

"He was killed in a car accident, a year after our funding dried up."



"Your mother had him working on moles that acted like a virus. They could be spread from person to person through skin-to-skin contact, body fluids, just breathing on someone."

"That research had nothing to do with my mother," Ian said, shaking his head. "Del was evolving virus moles so he could piggyback White Knights onto them – moles like mine and Alice's, that could do coronary artery repair, or could target cancer cells, or build new circuits around Alzheimer's tangles in the brain. And Greg was evolving a colony of autoimmune-defusing moles so that the virus moles could deliver the White Knights safely. Eventually, they wanted to develop a whole family of moles that would basically keep house in a person's body. Monk and McFadden would have blown traditional medical biotronics out of the water."

It was Saul's turn to shake his head. "But what I'm trying to tell you is that your mother had Monk working on a project specifically for her."

"That's bullshit."

"I'm only telling you what she told me."

Ian opened his mouth, then clamped it shut.

"Supposedly," Saul continued, "these virus moles, after contracted, didn't amplify *ad infinitum*, only enough to do two things: one, infect other hosts; and two, cannibalize themselves to construct a sleeper mole that was designed to lodge in a cerebral artery, and wait."

"Wait for what?"

"I don't know. A signal, maybe. Something to activate the sleeper mole to –"

Ian finished the sentence: "To create a terminal cerebral hemorrhage."

Saul lifted his goblet in mock salute. "Then she did tell you about it."

Ian's head moved slowly from side to side, his eyes on the floor. "No," he said slowly, his voice hollow and distant.

"But you get the picture." Pause. "Your mother called it her 'trickle-down economics' program – a joke...from Reagan's administration." Saul shrugged. "Well, it was to be her 'when-the-shit-hit-the-fan' plan. She would infect as many national and corporate leaders as she could shake hands with, and, of course, everyone they came into contact with would be infected, trickling the sleeper moles all the way down the corporate and political ladders. Then, if she needed some clout for a last-ditch effort –"

"Did she ever do it?"

"I don't know. She only mentioned it a couple of times, and that was years ago. Made me promise to protect you – you know, take you into the Valhallas to some mine she said you knew about."

Ian's eyes widened. "That's what she said, the mine." He stood, started pacing, then stopped and faced Saul. "But Monk was killed in 2030, a year after Callwell packed up and went to UCLA. And McFadden took that administrative position at U of Calgary – left mole research altogether." He started shaking his head again. "It couldn't have happened. They had at least another decade of work ahead of them."

"Fine," Saul said. "Forget the mole theory. But then explain to me what the hell you're doing here in my living room while we're being invaded by the goddamn coalition forces?"

Ian's hands hung limp at his side. His mouth opened and closed, like a beached fish. Finally, he said: "How many people could she have infected?"

"Dunno." Saul shrugged for effect.

"A hundred? A thousand?"

"I don't know," Saul said, and he could feel the old dread, cold and nasty welling up inside him like vomit. "I don't want to know."

"And how many could *they* have infected? A million?"

"You're the engineer, you do the math."

Ian started pacing the floor again. "Are we infected? Is *she* infected?"

"I have no idea," was all Saul said, but a sudden sensation of microscopic maggots crawling inside his head blossomed and amplified, paralyzing him with a squirming, liquid fear.

7. WAR

The drive to the parking lot at the start of the trail up into Valhalla Park was torturous. Ian's little car wasn't designed to endure rugged gravel roads – it was a lightweight commuter car, nothing more. The solar panels couldn't keep up with the drain on the batteries, and even though they turned the radio off, it didn't seem to make any difference. They had to keep stopping. It was after 1800 by the time they made the parking lot.

Ian's lungs burned as he climbed the steep trail. His thighs and back ached. His pack was way too heavy. He had never been much of a hiker-kayaker-skier kind of guy, although he'd always wanted to be, living much of the time here in the mountains, and so, perhaps to motivate himself to get out there, he'd bought himself gear, good gear. But he left it sequestered in the basement, preferring in the end to look at the out-of-doors from the comfort of his living room, or the bathtub on his deck, rather than slog his way through it.

He looked up to see how far behind he'd fallen. The old man was up on the next switchback, maybe ten meters ahead of him, and not breathing nearly as hard as he was. *Christ Almighty*, Ian thought with disgust, *I'm in worse shape than an eighty-nine year old poet.*

They'd planned to make it as far as the campsite at Drinnon Lake. Assuming one of us doesn't keel over with a coronary, Saul had said with a grunt, as if he'd actually been serious. Which, Ian thought in hindsight, he might have been.

Ian cinched the hip belt on his pack a little tighter, trying to take some of the weight off his shoulders and back. He wished he were back home, lounging in the old claw bathtub on his deck, staring lazily across Slocan Lake at the ice hugging the Valhalla Mountains, instead of wheezing his way up a trail into them. He had bought his house in New Denver mostly because of water: a startling view of the lake; clean, potable water gravity-fed from a stream high above the property; and, most decadently of all, a tiny hotspring pushing out of a bluff just above his perennial garden, which he piped to the deck and into the old claw bathtub that was hidden from peeping neighbors by a Virginia Creeper on one side, the house on the other, and a row of ornamental cedars from behind. He was glad he lived in WestCan, where, at least, there was water. Less of it as the years went by, for sure, but still, nothing like the dustbowl of the midwest American states since the Ogallala aquifer had run dry, or the countries that had been swallowed up by the Sahara in Africa, or the extreme water rationing in Euro, or, worse, the water wars in the Middle East. Ian shook his head. That's what this invasion was: a war over water, with only one side fighting.

"Not much further," Saul called down to him.

Maybe that's all his mother was up to, simply fighting back. Maybe the sleeper moles – if they even existed – weren't contagious. Maybe she had simply targeted specific leaders. Maybe there wouldn't be a pandemic of death-by-cerebral-hemorrhage.

"Are you sure about the moles?" Ian called up to Saul.

Saul frowned at him, leaning heavily on a walking stick he'd fashioned from a dead branch.

"You know, about my mother infecting all the leaders with those sleeper moles."

"I told you, it's a guess."

"But what if you're wrong, and that's not what's going to happen at all?"

"I don't know what you want me to say, Ian. Twenty years ago JoJo made me promise to protect you –"

Ian snorted.

Saul held up his hand to keep Ian from interrupting " – yes, protect you. Her words, not mine. And it was then that she told me about the moles. So what am I supposed to think? This is your mother we're talking about. She works in mysterious ways. And it's not like I was part of her inner circle, you know. Not like Monk, or even your daughter. I was just the late great Teth Millar's widower. Period. And a drunk who showed up at a couple of key negotiations far too many sheets to the wind for anybody's liking."

"I just can't believe she'd do such a thing."

"You can believe what you want. In the end, what happens is really what counts, right?"

Ian wasn't sure that was true. It had to matter what you believed, or felt. If right and wrong were about actions only, mere behavior, then how could you argue that humans were moral beings? What about remorse, or faith, or loyalty? Surely these were worth something.

Or maybe not. If one person, a single individual, with the power of a god, can decide your destiny, your fate...

Ian kicked at a rock, then threw one foot in front of the other, pushing against gravity and against the mass of his own fear, to catch up to Saul, who was sitting on a stump now, catching his breath. Night was at hand, and they needed to make camp before dark.

8. WARRIORS

Dahlia woke feeling cold and stiff. Her muscles carped at her as she moved, and she was shivering ever so slightly, like a leaf in a light wind. She pulled at the blanket; wet cold slapped her face and she breathed in wintry air.

Night. She was in the ice cave. Fingers stiff, she fumbled with the zippers on the top of her pack, retrieved hat and mittens, water and dried apricots. She ate and drank and felt even colder. Then she bundled up the blanket, stored it, and shouldered her pack. Her muscles burned as she felt her way to the mouth of the cave.

Her feet were cold, but dry. Wind fingered her face as she groped her way out onto the moraine. There was just enough ambient light from the stars and the sliver of moon reflecting off the ice for her to make her way along the serpentine back of the moraine. She dared not risk using her headlamp. Progress was slow, but now that she was moving she started to warm up, the aches in her body retreating.

Under her boots, the moraine twisted, began to climb up the mountain. She stopped, retraced her steps, searching for the creek that was marked in blue on the map on her BEE.

Night was melting into day.

There, water to guide her. *Ice to hide me, water to guide me*, her tired brain chanted as she worked her way along the stony edges of the little creek, following it away from the glacier and down into the heart of the Valhallas. She had crossed the pass.

In her mind, Dahlia saw herself as the bridge between the Warriors and the ex-premier, and underneath her ran a river of conflict and anger and, at times, sheer terror. Not just her own, but the Warriors', too. They hadn't wanted Dahlia because of who she was, but she couldn't abide living with her father's pococuranteism and felt driven, like her grandmother, to be doing something to make a difference. She and the Warriors came to a turbulent truce after she served eighteen months in prison for blockading the Great Slave Lake waterline.

A terrible time. Her mother visiting in prison, only once, her back stiff, shame like a veil shrouding her face. They spoke little, Dahlia overwhelmed by this middle-aged apparition, a ghost of her childhood returning to haunt her with ugly feelings she'd thought she'd buried well enough. Her father she could at least yell at. But her mother seemed too intangible, almost as if Dahlia had conjured her from the land of the metaphorically dead and then didn't know what to do with her once she appeared.

Dahlia never saw her again. She spent the next several months sluicing her memory for utopian childhood bytes of her mother laughing, of Christmas delight, of bedtime kisses... of anything that might spark a flash-fire of color against the black and gray diorama of her childhood.

But at least her mother had the strength to leave. Her father, on the other hand, had been unable to muster enough personal power to stand up to his own mother, to strike out on his own – to even have a contrary opinion. He'd been one of the world's leading mole engineers, but when the going got rough, he simply quit, 'retired'. Went back home to his mother. He seemed a child to her, lost in his desire not to be left out, which made leaving him out all the more important. He drove them to drive him away, she was certain. Weakness was dangerous. Need was dangerous. And fear, well, fear was suicide.

She hiked into the bright morning, her muscles leaden with fatigue.

What would happen if they didn't ingest the moles before her grandmother's deadline? What were the moles going to do to them?

A story rose in answer, a chapter springing from the ground of her own life. Her grandmother had injected her with a syringe of moles, and she had gone to visit Nigel, that last time, gloves on her hands warding off contact until they wheeled him out to her from the prison hospital, and she slipped off her gloves, cupped his slack face in her bare hands, skin on skin, saliva from his slack lips a lubricant. She spoke to him, watched his dark eyes, which were now permanently deviated to the right. He gave no flicker of recognition.

When she was certain she had touched him long enough – even though her grandmother assured her she needed only the briefest contact – she pulled on her gloves, kissed him goodbye.

He died the next night. Massive cerebral hemorrhage, the meningeal artery oddly split lengthwise. Must have fallen, hit his head on a sink.

And the guard she touched on her way out, feeling deliciously fortunate to see him there in the common room on duty, one of the three men who had been suspended for beating Nigel, he too died the next night.

At her grandmother's house in Victoria, after the visit to Nigel, she ingested the antidote moles, to destroy the infectious mole inside her *before she wreaked havoc on the world* – her grandmother's words, not hers.

Wreaked havoc.

Dahlia stopped. How many people does one individual touch in a single day? she wondered, alarm boiling up inside her. And how many people do *they* touch?

She unbuckled her pack and dropped it onto the ground, then eased to her hands and knees and splashed ice water on her face from the creek she was following.

No. She shook her head as she stared at the water rushing past her. No, it couldn't be true. In the past three years, JoJo had gone around the world lobbying for new environmental laws, revamped education and medical policies; in the past year, she'd met with almost every national and corporate leader on the planet to pitch the Fair Trade Covenant.

A graphic, usually benign, seen in every netnews magazine that followed her grandmother's campaign: JoJo shaking hands with one leader or another.

Good God!

How many? How many? Blind with sudden panic, Dahlia grabbed her pack, flung her arms into its straps, and began to run. The moles in the mine were the antidote – they destroyed the killer mole.

Branches whipped her face, her arms. Terror drove her down through the bush. Only four days left.

Dahlia doubled over, dry-heaves tearing at the muscles in her abdomen and between her ribs. Her pack rode up and smacked her in the back of the head, knocking her to her knees. The sharp tang of moss helped her to regain her focus. She needed to pace herself. She had too far to travel to be foolishly wasting her energy by running, and besides, tripping and breaking her leg now would mean a long, very unpleasant death. And if she survived to Day 5, then, a sudden splitting headache, and *poof*, eternal rest. "Oh, yay," she said out loud.

I'm just over-tired, she told herself. I'm not thinking straight.

She sucked in damp air, settled her pulse a little. She felt embarrassed at her panic. She didn't know anything for sure; she had no proof. She'd displayed more fortitude standing up to riot police with stun bullets and shock batons, for Christ's sake. As she rested, she decided to make camp, even though it was just noon. Food and sleep were in order. Then she'd have her proper wits about her, her Warrior self tidily tucked up. She hadn't had a full night's sleep since she'd gotten word that the tug attack had been executed and the invasion had begun. Plus it wouldn't hurt to take another look at the map on her etherpal – maybe there was a shorter route to the mine. She was sorely tempted to log in for her GPS status, but she didn't want anyone tapping into her data stream and then sending a gunship to escort her off to some military dungeon somewhere.

The water boiled and she dropped dried udon noodles into the pot, turned off the fuel to conserve it, and covered the pot with a lid. She wriggled into her sleeping bag, lay on her back to stare up through the trees at the blue July sky.

She couldn't remember the last time it had rained. The summer had been unusually hot and dry. The weather had been so strange of late, mood-swinging wildly like a bingeing drunk, raging one year, quiet and subdued the next. The oceans had risen two meters in the past decade; Antarctica continued to fracture and crumble; the Amazon River was only half its turn-of-the-century size; the Great Lakes had shrunk in volume by twenty percent more in the last five years alone.

Dahlia put her hands behind her head. When Brazil had privatized its water in order to borrow money from the International Monetary Fund, Western Canada became the

largest repository of commonly-held fresh water on the planet. While Premier, JoJo had run, with startling success, a limited program of water trade with countries willing to invest in education and health industries. But it hadn't been enough. The transnationals sued in World Court, trying to force Western Canada to privatize, so JoJo sold more bulk water than she had planned to the Can/Am partners to raise the capital to pay to maintain other avenues of trade. But the squeeze was on. Eventually, she resigned – retired was the official reason – under pressure from inside her party, wanting her to take a more flexible position, which she, of course, refused to do.

The Warriors, who had always considered themselves JoJo's nemesis (although JoJo had said, compared to the transnationals, the Warriors were nothing more annoying than a sliver in one's finger), flew to her defense when she was ousted, seeing the writing on the wall as the new Premier took office. 'The devil you know' and all that, Dahlia had noted with satisfaction. In fact, she was certain that her grandmother's resignation had cemented her own welcome – not quite with open arms, though – by the Warriors when she was released from prison.

A kind of panic had infected the upper levels of the Warriors. They nailed together an international Trade Covenant and puppet-mastered the oddly-willing ex-premier around the world to meet with varied and sundry leaders to discuss the Covenant.

Dahlia sat up, lifted the lid off the pot, added the powdered flavoring and stirred. They had been so hopeful! The Covenant was going to provide the means to beat the transnationals by instituting a kind of international economic democracy. China's signature would let them really twist thumbscrews in the UN.

The Covenant had been Teth Millar's vision. Dahlia had read everything Millar had written, listened to every recorded speech, seen all the footage, but what she loved most was the earliest version of Millar's Covenant, published along with several of her speeches by Saul not long after her death. In that version, Teth's vision for the future was clear as the July sky above, and just as big and brilliant. So full of promise, and goodness. And, well, simple damn common sense.

She ate her soup, scrubbed the pot and chopsticks in the creek. Then she returned to her sleeping bag and zipped herself inside her bivvy sack. She settled herself with breathing exercises, and slept.

Dahlia dreamed that her mother visited her, right here in the mountains, appearing in the night beside her bivvy sack, standing with her hands clasped in front of her just as she had in the common room in the prison. Dahlia knew then that her mother was dead, even though in another part of her brain she was aware that she was only dreaming.

"Your father is not the fool you think he is," she said to Dahlia.

"Then why did you leave him?" She remained cocooned in her sleeping bag, the mosquito mesh of the bivouac sack still zipped in place. Her mother was framed against the night's stars, oddly front lit, but without the Milky Way diminished.

"Walk with me."

Dahlia stood, unencumbered, wearing child pajamas, flannel with big buttons up the front and a print of teddy bears sitting on clouds. These had been her favorite pajamas. She took her mother's hand, and they walked along the trail in the direction Dahlia had come.

"Your father's devotion to your grandmother was too fierce a competition for me. She was suffocating me. Even though we lived a thousand kilometers away, she was like a god, her

power over him so absolute. He only had to believe she wanted or needed something, and he felt compelled to act on that belief. I took up so little space in his heart compared to her."

"Why did you leave *me*?"

She stopped, turned to Dahlia. Reached out a white hand and touched Dahlia's cheek, softly, as if she were a delicate thing, a blossom. A dahlia. "I was given a choice: you, or my life." She shrugged one shoulder as she dropped her hand. "I chose my life. Had I chosen you, I would have lost both – my life, and, by default, you."

"He threatened you?" Dahlia asked, incredulous.

Her mother laughed, head back, the sound scattering the stars above her. "Of course not, darling."

Dahlia woke, shivering, the light of dawn pallid as if the sky had been struck by fear.

9. TELESCOPE

Saul pulled his sleeping bag over his face and head to trap some body heat, to keep the mountain chill from shivering his bones, but all he could think of was death. If he were right, and JoJo had indeed infected every person she came in contact with, and each person in turn infected every one they came in contact with... It all depended on how long each person was infectious and how many people were contacted during that period. If each person were infectious for, say, two days, to make the math easy, and in each of those two days contacted ten people, that's – he touched the numbers into his BEE – twelve-point-eight billion people in fourteen days. Jesus. If memory served, the last population estimate was around 11.5 billion.

Saul turned off his BEE to lie in the dark.

Even if only half the world's population died, he mused – given the inequities of isolation or multiple contacts of the same person – the population that remained would find itself quagmired in apocalyptic chaos. Planes would crash; hospitals would close; industries would grind to a standstill; power would fail; communications would die.

He was glad Teth had not lived to see this.

Of those who survived the sleeper moles, if half lived through the calamity afterwards, that would leave only 2.8 billion to rebuild. Or maybe less. Saul shrugged to himself. *Rebuild*. Hell, they'd be thrown into anarchy – mobocracy, really – with warlords rising up like antichrists, trying to take control. And control of what? A crippled, dying planet, already extensively polluted and pillaged? Rampant cholera, typhoid? And a splintered, warring diaspora of all that remained of *Homo sapiens sapiens*?

Sleep, like swirling water, rushed past him. He didn't sleep much anymore anyway – a result of aging, he assumed – but he thought after such exertion these past two days he would sleep like a baby. Yet gnawing on death always disturbed his rest. He'd done far too much of it lately, with writing the memoirs. He felt haunted enough by the past without this exercise in resurrection.

And yet, he knew, without the past...

He turned his BEE back on, and put in the earphone, found the file, a piece he'd been working on some days before the jets flew through. He'd written it in the third person, as if he were simply one character in the story of his own life. Besides, it dealt with that annoying problem of starting every paragraph, every sentence, with I, I, I.

He closed his eyes to listen to his own voice, hoping that sleep would find him instead.

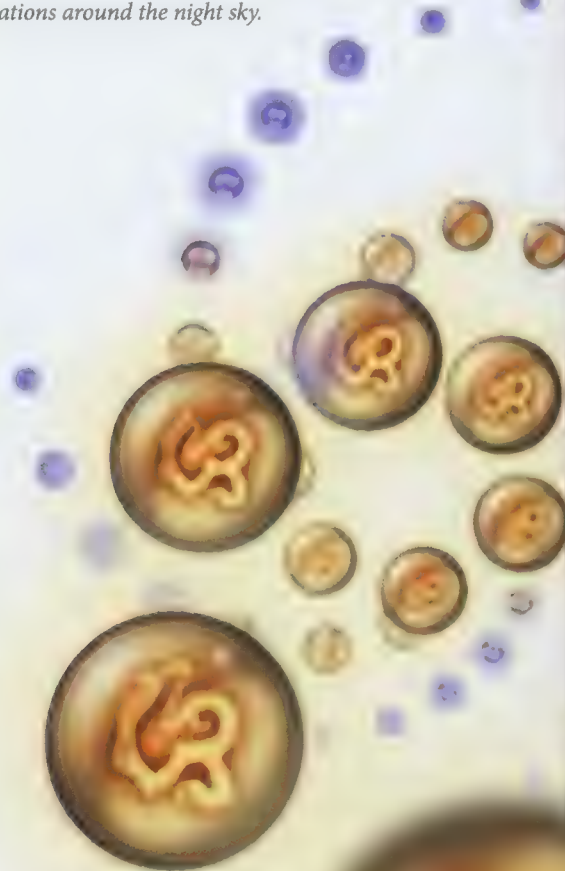
It started with the telescope.

In a cardboard box amongst the stuff he'd hauled over from his mother's place when she died decades before, he found the inexpensive 60mm refractor telescope his mother had given him when he turned ten. It was the year the Americans first put astronauts on the moon. Aldrin, Armstrong, and Collins out there in the orbiter. It was the same year Nixon began pulling troops out of Vietnam. The year Ho Chi Minh died. But he didn't care about politics then. The moon landing, though, that was different.

Packed underneath the telescope lay tattered novels and collections of short stories. Science fiction. Aliens and space wars and bizarre planets with hideous monsters. The stuff that got him through adolescence and his parents' divorce.

On clear weekend nights, while his chain-smoking mother fought with his older brother, he'd bundle up and sit outside in the winter cold with his red-cellophane-tipped flashlight, mapping the surface of the moon, learning the constellations, looking for undiscovered planets, and hoping beyond hope he'd spot a UFO that might take him away to an alien world on an adventure so wonderful, so amazing, he'd stop breathing just dreaming about it.

He was thirteen and in love with the stars, and with the space creatures and grand empires of science fiction. He crouched on a wide, flat rock up in the back pasture – it was just before they had moved into the city, into Kelowna, when his mom sold the cherry orchard to pay off their debts – his stargazing rock, where he mounted his telescope and traced the rhumba of the constellations around the night sky.



There he crouched, thinking of Arthur C. Clarke's *Moon-Watcher* from 2001: A Space Odyssey staring up at the great, round light, and of Astronaut Dave Bowman who flew out in the *Discovery* to Saturn. It was in the tradition of those names in Clarke's novel that he gave himself his secret name.

He waited for Orion to clear the ridge completely before he began. Orion, the great hunter, lover of Artemis, outcast. He crouched on his rock and watched the familiar patterns of lights, his friends, his gods and goddesses. This was his sanctuary of worship. Standing, he greeted Orion, naming by heart each of the stars and nebulas in the constellation. But as he stared at Orion he no longer saw a great hunter, but rather a great and beautiful alien, both like and so unlike him, a goddess of sorts, who called to him, who wandered through his dreams and kept his passion for the stars alive. She was lunging, right arm raised high, fighting back, her long hair arcing out behind her.

He held his hands out to her, and said: "I call myself Starseeker. It is the name you will know me by, and when I am older and I come to you, I will say, Starseeker has sought the stars and found them."

At that moment it seemed as if the soles of his boots were electrified, and that he could have made sparks leap between his fingers if he had wanted.

Science fiction carried him through Trudeau's invocation of the War Measures Act and the arrest of Mr Dudley, his favorite teacher. Through high school and the first frustrating years at UBC where he studied Creative Writing.

But then he met Wayman and the new work poets, and they introduced him to the Latin American poets, including Pablo Neruda. Through them he came to believe that his destiny was to be somewhere in the eye of a great whirlwind of transformation he foresaw overtaking the world.

Poet of the working left, he smirked.

But there's no such thing as destiny – that's saved for classical heroes and a world in which gods control everything. Not that world; not that time. Destiny was simply how the powerful explained why they ended up on top.

But he believed it was his call in life to help transform the capitalist, eco-rapist economy of the first world into something more user-friendly. What a guy, he smirked, what a hero. And that's what they'd called him, afterwards.

He wrote his poems, threw himself into the labor movement, studied Neruda. He moved to the Kootenays and became active in building bridges between the environmentalists and the loggers. And there he met Teth Millar, at a Sunday evening meeting about logging in Slocan. The Chair mishandled things, tempers flared, then suddenly there was quiet as she rose, her body easy, and she smiled. He couldn't take his eyes off her face.

"It seems to me," she said, "that there's no meeting taking place at this meeting. I don't know you. You don't know me. That makes it easy to tell each other, 'Hey, you're doing it all wrong.' Makes it easy to do the pointing and the blaming."

Like wading into a stream, she simply eased her way among the people.

"I'm a carpenter," she said. "I build houses. Out of wood. But I'll build them out of recycled plastic, or out of pressed hemp, or out of rocks from the moon, if that's what we decide. I like wood, the way it smells, the way it feels when you've sanded it smooth as a baby's butt. I want to keep using wood to build houses; but I also want our kids to use wood as well, and their kids, and their grandkids. I really don't think we can solve this problem using the same adversarial kind of thinking that created it in the first place."

"I'm just people meeting people," she said to him later when he'd begged her to go out to the Slocan Inn for a drink after the meeting. "The issues are secondary."

For Teth politics was breath. Building houses was bread and butter. But, he discovered, poetry was everything else.

He fell hard.

They moved into an old log farmhouse on five hectares in Appledale in the Slocan Valley. He wrote poetry and taught Composition and Creative Writing at Selkirk College while she built houses. They politicked together, campaigning for the failing New Democratic Party through the nineties and the early oh-hundreds.

The year Teth ran for office, potable water became a commodity on the stock market under TATA, the Trade Agreement of the Americas, and the fight was on. It seemed that the only way to protect water and get out of the historical free trade agreements was to create a separate country – a new country wouldn't be shackled by the TATA. They campaigned hard, targeting the relationship between national crises and globalization, US militarism, the commodification of resources (water in particular), the devaluation of education and health care, the exploitation of third world labor, destruction of the environment, even the space program, which was gearing up for an overpriced Mars expedition.

He had always wanted to be an astronaut, to walk in space at the end of a lifeline and see the Earth sitting poised among the stars, bold and elegant and round as a goddess should be. But reality whirled him away and he forgot all about the wonder, the startling excitement of those child's daydreams.

Teth had been shot at close range with a .44 Magnum Smith & Wesson. Twice in the chest. By some little shit from a newly formed right-wing militant group outside Calgary. A bullet through each lung, blowing great holes out her back, spattering her blood against the wall behind her. Not just misogyny. She had been the vortex of the separatist flood that roared across the western provinces, bringing hope, laying down a community-centered order which overran the western capitalist-democratic disorder with something more originally democratic. With something kind.

That was the theory anyway.

Teth's rise to martyrdom, like Biko's or King's before her, had only fueled the already raging fires. He had no idea how he would live without her.

But there was so much work to be done. The initial rage and riots that erupted with Teth's assassination needed artful handling. He organized vigils, wrote great litanies and speeches, threw all his energy behind JoJo's leadership, and quietly drank himself to sleep when the nights seemed like they wouldn't end. He immersed himself in negotiations with companies and labor unions, butting heads and pounding tables, hammering out a means of survival for communities from Comox to Kenora. To establish a new country called Western Canada.

Seven drunken years boiled through him and when there was nothing left inside but an ineffable, unquenchable anger, he left everything – JoJo saw to that – and went back to the farmhouse in Appledale. He needed to remember Teth. Not the political martyr image of her that had been burned into his brain, but the intimate, flowing memories of her, of the smell of her hair, the tightness around her mouth when she cried, the sound of her snoring beside him on the mattress on the fir floor the weekend they moved into the old log farmhouse.

Remembering Teth.

And he would find himself standing outside under the Milky Way's arm, shivering, hearing the great sounds of the night

around him. He'd go into the lighted farmhouse to open another bottle of wine, but then he'd awaken again, his back sore from leaning against a decrepit apple tree, his feet and hands numb from the cold, his mind suddenly alive again, wandering.

And so he had JoJo's people find him a telescope, an 8-inch compound Schmidt-Cassegrain. It was the least she could do...

There was a place not far from the sacred apple tree in the unattended lower orchard that was out of the wind, but provided an unhindered view of the night sky. The kindness of the stars wove through him, tangling with his grief and his anger – gentle, unrelenting, compassionate.

He renewed his friendship with them, relearned their dance steps. He returned to the books of his adolescence, revisited the worlds and bold civilizations they laid before him. He reintroduced himself to the alien.

A year went by. A year spent stargazing, fixing up the old barn, resurrecting the garden plot behind the house, gathering firewood for the winter, and redecorating the kitchen in blues and whites and bits of stark yellow. And he had begun writing again. Poems. Little three-line things, like haiku, with a gasp or a hint of the holy between the second and third lines.

He was alive again, having learned from the stars to forgive Teth her inculpable absence. And to forgive himself, his impotence in the bloody face of her death. He had learned to feel her with him in the quiet blackness of the night's shivering cold.

And he had learned to live his life without her –

Saul slept, finally, and while he slept, Teth came to him in a dream.

10. BLUE GLASS PEBBLES

Ian rolled about inside his sleeping bag like a drowning rodent. His legs ached and burned and he had a wallop headache and his back was so stiff he wasn't sure he was going to be able to carry his pack today. Light worsened his headache. It seemed that he had hardly slept.

Grunting, he crawled out of his sleeping bag. Saul was already up. He had set up his tiny battery-operated radio, and was trying to get some reception, and the endless scratching noises irritated Ian. There had been news on the radio last night, but now just static and dead channels. The newscaster had said that coalition special forces had penetrated a Spirit Bear Warriors' stronghold on the northwest coast, seizing an unspecified number of weapons, as well as some bioware which they hoped would provide them with critical intelligence. Ten members of the eco-terrorist organization had been captured, three had died in a fierce gun battle.

Ian doubted that Dahlia had gone to the coast with JoJo. From what he had overheard, he believed they were heading north, into the Peace country, probably to smuggle JoJo into Nunavut, and maybe get her off the continent somehow, to one of the Warriors' sibling organizations in Euro or even China. Despite this nagging worry, he was sure she was fine.

"Nothing but goddamn static," Saul said. "Must be a media blackout. Isn't there a WestCan satellite radio broadcast?" he asked without turning his head.

"I don't know. I never listen to radio." Ian stretched his back until there was a satisfying crack.

"But it's your satellite system."

"All I did was organize the program to get it into orbit. I don't have anything to do with current operations. I don't know what they use the satellites for besides TV."

"You don't know much, do you?" Saul said, annoyance darkening his face.

"Go to hell," Ian muttered.

Saul ignored him.

Ian shrugged and lumbered around the campsite trying to shake the stiffness out of his muscles. He was used to being ignored. He had spent most of his young life at private schools, first in the Kootenays, then later on Vancouver Island, when his mother initially won her seat in the legislature in Victoria. His father, a nameless man, never surfaced, and his mother once joked about immaculate conception, but Ian remembers not laughing, and the subject of his father joined the burgeoning list of things they didn't talk about anymore. He'd spend his holidays in Victoria, living in his mother's house, and then later as a young adult he would drop in dutifully to visit her, measuring out the caustic bitterness she exuded in manageable doses. Much of that time in her house he spent alone, reading, or working his way through her collection of movies, simply waiting until she had time for him.

Sometimes they'd go down to the ocean's edge at Beacon Hill Park, and she'd walk beside him – later she'd maneuver her spider-chair over the stony beach – as he looked for glass pebbles, tumbled smooth by the sand and water. She'd been hit by a sniper's bullet when he was 20, paralyzed from the waist down. The spinal cord regrowth unit at UBC had been among the first casualties when corporate funding flexed its muscles after the Western Separatist Party came to power. She had refused to go to Canada, or the US, for treatment.

He'd scuff along the beach, head down, half-listening to her rattle on about safe-to-discuss topics like her garden, which mostly engulfed her small three-bedroom bungalow, the public domain gossip of party members or international personalities, or various movies, her one soft spot for popular Can/Am culture. In turn, he'd tell her about his soccer games, the teachers at school, and later about his graduate work in biotronic mole engineering.

He'd spot bits of smooth broken bottle amongst the stones – white, brown, various greens, and rarest of all, the blue ones – tumbled round by the friction of sand and stone, and massaged up onto the shore with the rest of the ocean's detritus. They were the only good that ever came of littering, his mother had said, as she held open the bag he emptied his meager handfuls into. He'd point out especially if he'd found any blue ones. As the years passed, the pebbles came to represent everything that was scarce in his life, love, strength, tenderness. Looking for and finding blue glass pebbles became a kind of parable about tenacity and reward, a pedagogical tool he used to remind himself that someday he would find what he was searching for.

Back at his mother's house he'd half-fill a clear vase with the sand-tumbled glass pebbles, stick in cut daffodils, or mums, or whatever happened to be blooming in her garden, and pour in fresh water. He'd set the vase in the center of the dining room table to be enjoyed during their meals together.

When they'd evacuated his mother just prior to the invasion, the security team found a 20-liter bucket filled with the glass pebbles he'd gathered over the years, before the beach ended up under a couple of meters of still-rising seawater. He realized then that he had assumed she'd always thrown them away, tossing them out when he'd left, always leaving the vase for him to refill upon return, their walks on the beach a kind of boondoggle of connection. He was a little stunned at the sentimentality of her saving them.

Ian returned to the camp to find Saul spooning gluey-looking gruel into his mouth. "Saul? Can I ask you something?"

Saul eyed him from under his out-of-control eyebrows.

"Do you know who my father was?"

Saul shook his head. "Best kept secret in the world," he said. "Sure, everybody had a theory, but there was no one hypothesis that really grabbed anyone's attention. Some pundit even joked once about parthenogenesis." He opened a bag of dried fruit, offered it to Ian.

"I dreamed about him last night."

Saul simply grunted, scrubbed at the stubble on his jaw with the back of a hand.

"His face was in shadow the whole time, so I couldn't see who he was. I don't ever remember dreaming about him before, which is odd, really, given that I think about him a lot." Ian set the bag on the ground between them.

"Even Teth had no idea, and she and your mother had been pretty tight."

Ian shuffled his feet. "Well?"

"Hey," Saul said. "It wasn't me. No offense, but I never liked JoJo much. She was good to me – don't get me wrong; she helped me a lot, more than you can imagine – but we never really saw eye-to-eye. On much of anything."

"You don't have to like somebody to get them pregnant."

"Are you speaking from personal experience here?"

An image of Dahlia's mother – her bright face flushed and laughing – spirited through his mind's eye, fish-hooking something in his chest, tearing it open just enough to bleed fresh, unwanted memories.

11. HABITAT

Dahlia could hear them inside the mine, arguing, their voices two distinct pitches, Ian's higher with more clarity, and Saul's... well, that deep-throated mumble of his. Dahlia wasn't sure when she'd last seen Saul. Her grandmother's retirement party three years ago?

The moss, crisp from lack of moisture, failed to silence her footfalls as she crept to the mine's entrance, a rough-hewn doorway into the rock two meters tall and a meter-and-a-half wide, with a gate of metal bars cemented in place. The gate stood ajar, its biolock hanging loose.

Ian, frustration ringing in his voice: "She didn't tell me anything!"

Saul: "Come on. You must have overheard something. A plan, an idea?"

Ian: "She left me out of everything. All she said was to give you the envelope and take you – if you'd go – to the mine, and once we got there – here – to wait."

Saul: "For what? Kingdom come? Till hell freezes over?"

Dahlia pressed against the rock until she could see down the length of the mine. But all she saw was darkness. She took Saul's question as her cue for an entrance. "Wait for me, I presume," she said and stepped full into the opening.

Someone sucked in air, Ian probably, because she heard Saul mutter, "I should have known." Dahlia wriggled out of her pack, retrieved her electric mini-lantern. White light flung back the dark to reveal Ian and Saul, both looking like haggard ghosts, standing beside a long row of plastic boxes stacked four tall and disappearing into the back of the mine.

Ian's mouth moved, then finally he said her name. "But I thought you'd gone with your grandmother."

"No. She had other plans for me."

"Where is she?" Saul shielded his eyes from the lantern.

"I don't really know, and it doesn't matter." She studied the long row of containers. "So which one is it?"

"Which one is what?" Ian said.

"The mole habitat."

"There's a habitat here?"

Dahlia nodded. "She's done something. I don't know what it is – she said you might know, Saul – but whatever it is, I don't think it's good."

Saul was swinging his head from side to side. "If it's what I think it is –"

"Saul thinks," Ian interrupted with a sneer, "that she's planning to exterminate humankind from the face of the Earth."

Dahlia sighed. "She wouldn't tell me. She just said there'd be a mole habitat, and that we each needed to ingest the moles before the day after tomorrow."

"Or what?" Saul said.

"Or," Dahlia could feel a weight in her, like a stone, settle, "we'd die."

"Like everyone else," Ian said slowly, horror in his voice.

Dahlia nodded.

"Will it really work?" Saul asked. "Can she actually pull it off, or is it a bluff?"

"I've seen the killer mole work," Dahlia said. "But not on this scale or with a delay." She shivered, the chill of her memory meeting the cool air of the mine. "We need to find that habitat."

Ian roamed along the boxes.

"How did you get the gate open?" Dahlia asked Saul.

"The biolock dealt for Ian's DNA. It was pretty simple."

Ian shouted from further in the mine: "There's a room back here!" Pause. "And a steel case, with a built-in biolock."

Dahlia followed Saul deeper into the mine to a room hewn out of the rock, and Ian, his headlamp blinding her briefly, crouching over a desk-sized steel case. The room, about the same size as Ian's living room, was furnished with several plastic stacking chairs, a table, and kitchen-style cupboards with a countertop.

Dahlia set her lantern on the table. Ian stood. He looked like he was about to say something, then changed his mind, and backed away from the steel trunk.

The lock was a simple fingerpad device, requiring a number combination and a DNA sample.

"Here," Saul nudged her shoulder with a BEE. "The water passages. The 'poem' she sent with Ian. The passages are numbered."

The numerals 8, 36 and 78 were bolded on the screen.

She slid her left hand onto the graphic and keyed in the numbers. A full minute passed, then the lock sighed and the lid hushed open to reveal a small habitat.

On top of the habitat someone had taped a memory pin.

"Hand me your BEE," Dahlia said to Saul. Taking the pin, she slid it into the port. The BEE prompted her to use the projection function. She pointed the device at the inside of the habitat lid.

Like a divine manifestation, an image of her grandmother appeared, jiggling slightly as the BEE bounced in Dahlia's shaking hand.

"At least one of you made it," JoJo said, her image fuzzy against the textured surface of the lid, "and hopefully all three of you. The proverbial shit has hit the fan, I presume, otherwise you would not be here. I had hoped beyond hope that it wouldn't come down to this."

JoJo sighed, tucked some invisible hair behind an ear, then

continued. "I know it seems like what I have done will bring about the extinction of the human species. The opposite result is my objective, however.

"We are like an Ebola virus, busily using up its host with no other host to leap into. In no time we will have depleted our nutrient source and we will die in our waste. By relieving the planet of most of its human burden, my hope is that those who survive will thrive, will build a new way of living, seeking peace and community first, and at the same time, doing great things, amazing things...things that were never before possible. Perhaps, Saul, even reaching out to the stars." She smiled suddenly, fully, but briefly.

"Now, down to business. I've waged a campaign of biotronic mole infection using leaders as vectors. I've planted sleeper moles, killer moles, and now, because of whatever event has just transpired to obliterate the final remnant of my hope, I have triggered the sleeper moles. The die-off will occur in waves, from the first to the last infected, starting five days after the moles are activated – enough of a delay, I hope, to have given you time to get to the mine and ingest the antidote moles in the habitat.

"Dahlia, I am counting on you as the driving force behind this new evolution. Ian, you are a master at organization and detail, even if you don't realize it. I couldn't have accomplished all that I have without you. And Saul, my dear Saul, you know where we have come from, what it cost us to get here, and so you will understand why this had to happen. And, of course, only a poet can tell the story of the apocalypse, and of the new earth that will rise from the ashes.

"I am the angel of Death; you are my angels of Mercy. The moles in this habitat will initiate a series of physiological changes – you will feel rather unwell for a few days, but you will live. (Hence, the room and supplies I've provided for your comfort.) Thereafter, you must make your way back into the world. Each person you touch will be infected with the moles you ingest and their sleeper mole will be deactivated. Be aware, though, that you will cohabit this planet with every person you touch, so choose carefully.

"As I've always said, the last battle – the great and final battle – will be over water. And so it is. Water is our birthplace, and our birthright; we are composed mostly of water. Without it, we die. And yet we have squandered it, poisoned it, wasted it, and in so doing, wasted ourselves. It is only fitting, then, that death comes like a floodwater, to wash the world clean. The few who remain will be as scarce as glass pebbles on a beach, but on them rests the burden of the future of the human species.

"Ian, Dahlia, Saul: have faith. We will meet at Saul's house in one month."

The image vanished.

Dahlia blinked at the blank lid. "How many can we save?" she said out loud, but thought, We are chasing a tsunami and trying to pluck out the drowning.

"There's not enough time," Saul said. "Millions'll die before we even make it back to the highway."

"Holy Christ," Ian breathed, then threw up, spattering bile all over the side of the habitat.

Dahlia crouched. Her whole body was shaking. The smell of her father's vomit brought her own bile into her throat. Everything they'd worked for, years of negotiating the Covenant, decades of fighting the transnationals, of blockading pipelines, sabotaging machines, cobbling together homemade explosives...all for nothing. Eighteen months in prison. For

nothing. Nigel, sweet, kind Nigel. All for fucking nothing!

"Okay," she said out loud, wrenching control of herself. "Okay. Let's get these moles ingested, and then we've got to figure out a plan. There might only be two or three days left."

"That'll only be start of the first wave," Saul said. "So, depending on who she infected first...well, whoever isn't in the first wave has more time."

"Can you prep the moles?" she asked Ian.

He nodded, not looking at her, and wiped his mouth with the back of a hand.

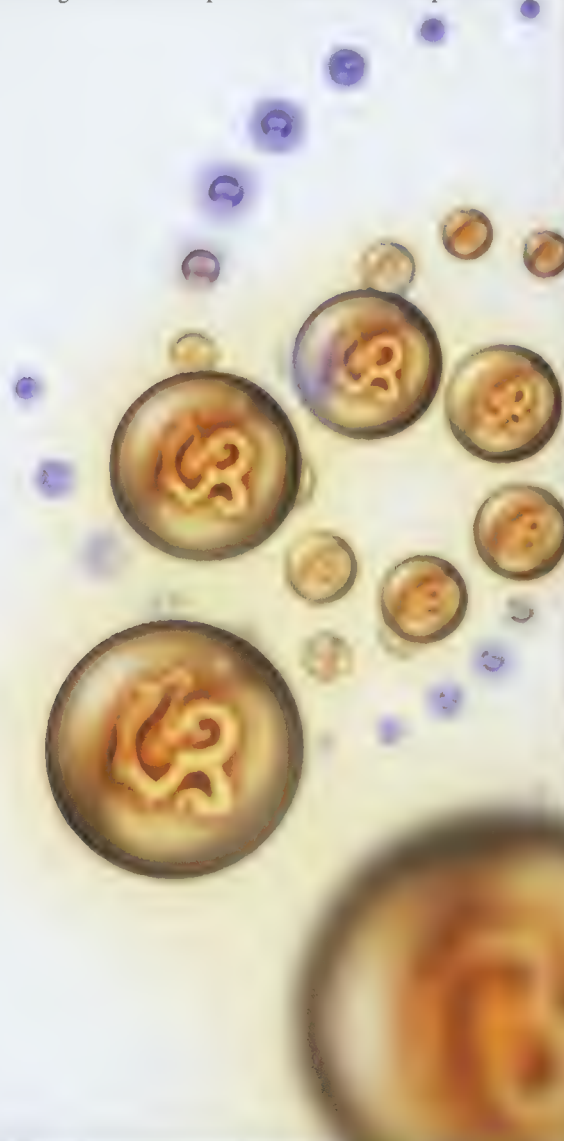
Dahlia was flooded by a sudden, sharp desire to slap him, then, to shake him and yell at him, to tell him to get his goddamn shit together, to stop feeling so bloody sorry for himself – but instead, she turned away, trembling with restraint.

12. MOLES

"Do you have a plan?" Saul said to Dahlia, trying to stop himself from thinking he could feel the sleeper mole scratching away at the insides of his right meningeal artery.

Ian poured water into three cups. He submerged the tip of the extractor, hit the release and freed five mils of mole media into each cup.

They were sitting around the table in the plastic chairs, the white light from Dahlia's lantern throwing hard shadows behind them. The table was littered with an assortment of food they'd scrounged from their packs, and from the cupboards



JoJo's people had stocked – Ian said they needed to eat, to elevate the levels of glucose in their blood stream to help feed the moles as they multiplied.

Dahlia shrugged. "Every idea is a dead end. The moment we surface anywhere public – the highway, a town, a grocery store – the military will grab us, and it'll be game over. But unless we go to where the people are, we're not going to be able to do anybody any good. And this is a very big world."

Ian handed out the glasses of mole-infested water.

Saul raised his plastic cup and said, "Blessed are they who hunger and thirst after righteousness, for they shall be filled."

Ian stared at him. "You are so full of shit," he said.

"Come now, young man, where is your sense of the momentous?" Saul turned the cup in his hand, studied the water, half-expecting to see the moles swimming about. *JoJo, what have you done?* "This cup is the new covenant sealed by the Earth's blood, which was shed that the sins of the many might be forgiven." He swallowed the mole-infested water in one gulp and thumped his cup on the table. "There, it is done."

"Jesus..." Ian was shaking his head.

13. ANGER

His daughter drank down her water, wiped her mouth dry with the back of a bony wrist. Dark wedges smudged her eyes, and her face looked overly thin – *she* looked overly thin, almost frail, her shoulders angular and sharp, her clavicles like thin bridges arching under her thin shirt.

But she was getting what she wanted, wasn't she, Ian thought bitterly. She was indeed just like his mother, always having to get her way. Always having to win.

"I thought you'd be happy about this," he said to her, a thin meanness slicing through him. "Saving the planet was all that mattered, right? Isn't that what she's doing, saving the planet for you from all us *humans* – we, the parasite; we, the virus; we, the toxic invader?"

"Happy?" she echoed. "Why would I be happy?" Anger serrated her voice. "We worked and fought and bled to get that trade covenant nailed down, and she was simply paying lip service, using us – using *me* – to infect the whole bloody world with her fucking sleeper mole. People died, my friends *died*, to keep her from selling –" She bit off the words, threw back her chair, and turned away into the shadow thrown by the lantern. Then she turned back, turned on him, her face sharp and drawn in the stark light. She leaned over the table, thrust her face close to his, her breath hot and fast on his cheeks. He stopped himself from pulling back, his anger abandoning him in the face of her rage.

"And what were you doing that whole time?" she snarled through clenched teeth. "Nothing. Not a goddamn thing. Just watching the show to see how it was all going to turn out." She straightened up, gestured around them with her arms. "Well, *Dad*, this is how it all turned out. Are you happy?"

Ian searched for the anger he'd had only moments ago, found it quailing deep inside, and wrenched it back into play. "You *are* just like her," he said, slowly pushing to his feet, feeling the heat of all those things left unsaid rising like lava from a tear in the ocean floor. "You'll settle at nothing to achieve your goal, no matter what it costs. You'll hurt whoever you have to, you'll mow down whoever gets in your way, you'll throw away anyone who isn't of any practical use to you. You'll –"

"If you knew anything about me, if you'd actually listened when I tried to talk to you, you'd know that's a load of crap. But

no, you were so goddamn wrapped up in whatever little make-believe drama you staged inside your head that you couldn't bring yourself to actually see what was going on in your life." Her breath shuddered. "Jesus, Dad, I knocked, but you never answered the goddamn door." And with that, she headed into the tunnel and back to daylight.

Ian's anger froze in place. He opened his mouth, but no words formed. He felt Saul's eyes on him, but couldn't take his own off the place his daughter had been.

14. MAGGOTS

She ate like a starving animal, delirium punctuating other intervals with hallucinations and tremors. In between, she slept as if dead. Sometimes dreams raged and bled into waking; she killed her father; then, resurrected, he would take her little girl arms and swing her up onto his shoulders, and they strolled beside her mother in a park with flowers; maggots tunneled through her body, cleaning house, renovating; her Gran stood up out of her spider-chair, sent it scuttling into a closet, closing the door on itself; Nigel kissed Dahlia's lips, ran the backs of his fingers over her breast, while blood leaked from his pretty eyes.

She rose to eat again.

15. DREAM

Saul woke feeling chilled. Must have been a frost, he thought as he curved his arm over Teth's waist. His knuckles butted cold stone. Confused, he opened his eyes to weak light coming in the window –

He jerked awake, lying on the floor of the mine, the damp stone glacial underneath him, and light from the entrance crawling as far into the tunnel as it could manage. He realized, then, that he'd only been dreaming. Sadness washed through him and loss puddled in the hollows of his heart. He pulled himself to his feet, rubbed at the heavy whiskers on his face. His watch told him it was just shy of eleven in the morning on August 3rd.

Empty food packages littered the table and counter, empty plastic water bottles were scattered all over the floor. Broken chairs, smashed supply boxes, cupboard doors torn off their hinges. Ian lay wrapped in his sleeping bag, half under the table. Dahlia wasn't in sight. It looked like they'd been on a week-long drunk.

Saul looked at his watch again. 11:03am. "August 3rd?" he said out loud.

Ian grunted from under the table, uncovered his head to stare muzzily up at Saul. "What did you say?"

"It's the third of August."

"I had this dream," Ian said as he wriggled out from under the table and sat, scratching his chest, "it was all jumbled together, but I dreamed that Del Monk was my father. Can you believe it?" He yawned. "It was weird. So bloody real."

"Where's Dahlia?" Saul said, but didn't wait for an answer. He turned and sprinted to the mine entrance and out into the bright heat of midday. He blinked at the light. Dahlia sat with her back against a fallen log, staring up at the sky. "It's been seven days," he said to her.

She turned her head to look at him, a gash stretching from above her eye down to the side of her jaw. It was crusted with old blood and mostly healed.

"Holy Christ," he said. "What happened –" But he knew. He'd seen it in his dreams: they fought, Dahlia and Ian, raging like ancient gods; she'd impaled him with a metal leg she'd torn

from a chair, and he struck her with the steel lid he'd ripped off the case that housed the mole habitat.

Behind Saul, Ian emerged from the mine, shirtless, fingering a bubble of dried blood just below his right nipple.

"What did she do to us?" Dahlia asked.

Saul's hip didn't hurt. His arthritic hands didn't ache. And his stomach snarled at him, demanding to be fed yet again.

16. TOUCH

Ian bounced on the balls of his feet, testing the weight of his pack, which held only the mole habitat – stripped from its security case – and as much food as he could stuff in around it. The rest of their gear they'd simply abandoned in the mine. Saul sat on his pack outside the entrance to the mine, BEE in hand, while Dahlia, impatient, chewed on her lower lip.

"We need to know what we're walking into," Saul said, a rebuke to Dahlia's impatience. He frowned at the display. "NetNews is still up and running, but nothing's current. The last blurbs are from earlier this morning. Let's see..." He touched his way through the zone. "Initial estimates are two billion dead. Collateral damage from those deaths underestimated, perhaps another ten million, but probably much higher – a nuclear plant meltdown in Pakistan, another near Prague; cholera outbreaks lighting up the map from Boston to New York to Montreal; something about a civil war in Brazil; seven nuclear strikes on Palestine from an unknown source –"

"Let's just go," Dahlia said.

Saul sighed, stuffed the BEE into his pack.

They retraced Dahlia's path through the mountains, stopping briefly at the glacier's edge to refill water bottles from a stream. They descended out of the Vallhallas rapidly. Smoke flooded the valley, blocking out the summer sun. By the time they made it to the western lakeshore, the sky was dark with haze and they could see great fires burning on the opposite shore below New Denver.

Ian's legs trembled from exertion as he rested at the forest's edge above the beach, leaning against his old kayak. Dahlia had used it to cross the lake the week before, then hid it in a hollow up in the bush, buried under armfuls of boughs and duff. They'd retrieved it and loaded the habitat and packs into it. Sweat soaked him but he'd never felt better. Whatever else his mother had done to them, this startling physical endurance was damn fine with him. He fingered the scar on his chest through his shirt, the strange memory of their fight a toxic morass in the pit of his stomach.

Saul was sprawled at the base of a massive Douglas fir. To Ian, Saul seemed fifty years younger – he was leaner, tougher, and he ran like a goddamn athlete, even with that pack on. Ian mopped his face with the front of his shirt. "You're sure you won't come with us?" he said to Saul.

Saul shook his head. "I need to go home."

Dahlia guzzled water from a bottle, threw back a handful of supplements, and tore open another package of protein bars. Then she got up and walked to the lake edge, binoculars in hand.

"They're burning bodies," she said. Ian went to stand beside her. She handed him the binoculars. "I'll see you on the other side," she said. He touched her arm, her face. She didn't pull away. "I don't know if I'm ready for this," she said.

He shrugged with one shoulder. "I'll be right behind you."

She looked sideways at him and began knotting her hair on top of her head. She kicked off her boots, pulled off her socks and pants, and waded into the water. She pushed off with a little dive and settled into an easy front crawl.

As he watched her swim away he wondered what the people on the far shore would see when she came out of the water. Would they recognize her as the granddaughter of a monster, of a dragon who had scourged the Earth, and see her, then, as some kind of beast rising from the lake, hair piled on her head like a crown, a mortal head-wound strangely healed, shining pink and fresh, scrubbed free of crusted black blood? Or as a Warrior-turned-messiah, gloriously kinetic, who could raise them up with a word, and who, unbeknownst to them, could destroy their inner nemesis with the touch of her hand, or a kiss? Or, perhaps they would not know her at all, and she would seem a stray, a woman lost, welcomed indifferently into what was left of their community, to share food and drink and the long work of grief?

17. BLANKET

Dahlia's toes scabbled on rock, found purchase, and she rose out of the lake, feeling reborn. The stench of burning flesh assaulted her. Several children spotted her and retreated amongst the adults, who had been occupied with unloading wood from a truck. They froze, eyes wide with stunned grief and a stubborn determination, while a dog inside the truck cab barked at her.

One of the men pulled a blanket from the cab of the truck, telling the dog, *Enough, be quiet!*, and brought it out to her.

Dahlia wrapped the blanket around her shoulders and thanked him, touching him on the arm, her cold skin craving his heat, her moles leaping and burrowing, gobbling up glucose, multiplying.

He ducked his head a little, as though he were shy, and took her by the elbow to *Come and meet the others*.

18. EYES

Saul shouldered his pack and struck off south along the lake's western shore, toward home. A dark pain burned in his chest, and he knew that this was something that couldn't be repaired by JoJo's moles. It was the simple knowledge that everywhere people were dropping like hailstones. And it was because Teth had come to him in the mine, as if in a dream.

Teth had come to him and held him as Dahlia and Ian tore at each other, their violence terrifying. She ran her fingers over his forehead, his eyes, until the terrible sight of them vanished and a vision came: a vision of himself, as if seen through Teth's eyes, walking along a corridor, legs weak from the initial round of drugs, but walking with determination in the artificial gravity. His destination was a small window in the wall at the end of the corridor, where he stopped for one final look at a retreating Earth, a single cyclopean eye, like a glass pebble, blue and round, nestled in the dark face of space.

He clenched his fist over his heart as he walked. The vision – he refused to believe it was a literal revelation of the future – showed him that he had done nothing since Teth's death except look backwards and wait to die. While the world around him fell away toward an apocalypse.

Saul unclenched his fist.

*Under heaven nothing is more soft and yielding than water.
Yet for attacking the solid and strong, nothing is better;
It has no equal.*

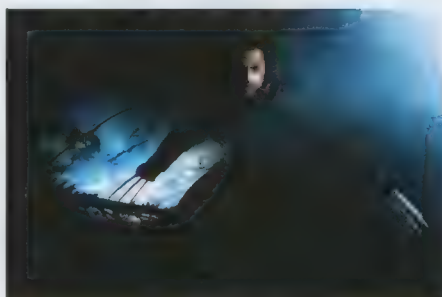
This was his resurrection. He wasn't going to waste it.

Steven's debut sf novel, *Burning Stones*, was published by Cosmos Books in April. He has sold over a dozen stories to Canadian publications but 'Blue Glass Pebbles' is his first international sale. He lives in Kelowna, BC, with his partner Christine, two dogs, three cats, and numerous tropical fishes. He makes his living as a paramedic.

In one respect, at least, *X-Men: The Last Stand* is a rather remarkable monument for film's most ambitious comics franchise to leave. If X2 was the first film made entirely out of ending, *Last Stand* is a pioneering attempt at making a Robert Altman movie out of leathered-up mutants chucking cars at one another. Gone, and good riddance, is the earlier films' fixation on their dreary Wolverine as the nucleus of the story. Instead, this last and most desperate X-mission audaciously tries to juggle twelve different characters' throughlines and two completely unconnected plots, not to mention the caprices of half-a-dozen A-list contracted performers' competing demands for something to do this time around.

In several ways it succeeds. It's busy, pacy, spectacular, and skips skilfully between its many different narrative lines. The savvy three-film contractual locks on a team of vastly overqualified supporting players – Stewart, McKellen, Janssen, twin Oscarees Berry and Paquin – have ensured that nearly every scene features someone it's a pleasure to watch at their craft. The shamefully underused Storm has banged the table hard enough to get something to do at last. The lineup finally makes space for a nicely-played Beast and a version of Angel that foregrounds that character's uniquely insistent pubertal blossoming, one of the touchstone moments for the resonance of the mutant allegory. (One can forgive this film a lot for the scene where young Warren's dad catches him self-mutilating in the bathroom.) Even the cure-for-mutancy plotline, and the contrasting political responses from three areas of the mutant community, is quite a decent inheritor of its predecessors' allegorical resonance – though it inevitably makes the whole thing much less about zits and hormonal anomie, and more than ever about sexual outsiderhood. Sir Ian looks as silly in the helmet as ever, but it's still a heart-swelling moment when he announces to the assembled Brotherhood: "They say they want to cure us, but I say WE – ARE – THE – CURE!" (and just as the evil mutants are thinking Gosh, that Robert Smith has let himself go) – the cure for that infirm, imperfect condition known as *homo [beat] sapiens!*

Where *Last Stand* doesn't even begin to work is in dialogue and plotting. With no relationship allocated more than a few lines under the new democratic X-regime, character interaction is pretty telegraphic from the start; and as the flaming trucks fly in the Alcatraz finale, the dialogue devolves to a kind of desperate primeval cliché–hurting. "Magneto wants a war, we'll give him one!" (It wasn't a good line in *Narnia* either.) When Mystique flips: "Hell hath no fury like a



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woman scorned." At the finale, re the rookie X-team: "They're ready." – "Yeah. But are you ready to do what you have to when the time comes?" Back to Magneto: "It's time to end this war" (tosses car). And after the one fairly genuine-looking fatality, Wolverine lets go in with a "Nooooooooooooo!" worthy of Calculon out of *Futurama*.

By now none of this comes as much of a surprise. We all know how the big superhero pictures are put together, and the *X-Men* series is the most demanding of them all. The story archive is reviewed for two or three available villains, to be stitched together into a single plot by brutal rounds of narrative Darwinism in which writers and drafts get crunched up by a development machine that eventually spits out its preferred composite of everyone's incompatible ideas. *Last Stand* has actually slimmed its predecessor's six credited writers down to two, both now regular members of

the mighty Marvel movie bullpen: X2 survivor Zak Penn and his fellow uncredited *Fantastic Four* writer Simon Kinberg, who's also had work on the *Hulk* sequel. But despite this nominal compaction, the finished script is the most ill-fitting composite yet. This being the end of most of the cast's contracts, it's a no-brainer that the Claremont/Byrne Dark Phoenix storyline, the most famous X-Men arc ever, has to be cashed in while Famke Janssen's Jean is still signed up (if initially a bit dead). But the whole point of Phoenix was that she was a figure of Galactus-like cosmic awesomeness, completely impossible to fit into a film about anyone else; and with the even classier McKellen still on contract, the result is a bizarre vehicle in which we have two entirely separate plots sharing the film side-by-side as if the other didn't exist. Following her curious 12A fully-clothed sensual awakening, our "purely instinctual creature, all desire and joy and rage" makes the unusual decision that it would be more purely instinctual to spend the film standing enigmatically around while Magneto chucks cars at people, belatedly snapping into life only when he's taken out, and scaling down the planet-destroying to a solitary execution in her living-room. It's a dismal, pallid shadow of the original concept, with that unmistakable old-chewing-gum flavour of having been masticated through so many story meetings that there's nothing left but the tasteless residue.

Other cast innovations seem merely ghosts. Colossus is in there, but no power on earth can say why. Juggernaut, once – long, long ago – a rogue Xavier sibling and the Kirby X-Men's awesomest nemesis, is tipped in as a minor henchperson played by Vinnie Jones who knocks himself out by running into a wall. Meanwhile Cyclops, consistently the coolest X-Man of all and the most completely short-changed in the films, disappears from this instalment a third of the way in, his true fate known only to the cutting-room floor, and the famous visor-off moment from Claremont and Byrne is reduced to one of those giveaway scenes with their real faces that mark an X-movie character out as making an all too final stand. Yet despite all the promises of ultimate closure, the door is left wide open for more, in both closing shots and the post-credits easter egg that's become every bit as obligatory in Marvel movies as the Stan Lee cameo. (But no surprise to anyone who wondered why a face of the star calibre of Olivia Williams was included in a fleeting hospital-monitor shot, or what her scene was doing so clumsily inserted into the Prof's story conference.) It's hard to see what's left for an X-Men film to do, and even David Benioff's Wolverine spin-off seems to have stalled in development; but nobody would put money on a lasting cure.

MUTANT POPCORN NICK LOWE

If life after Oscar has been a bit of a bed of thorns for the Storm diva, spare a pang for the Wolverine of screenwriting, Roger Avary, the wild claw-wielding Canadian teammate of Tarantino (till the credit rift over *Pulp Fiction*) and latterly Brett Easton Ellis. After two panned directorial breakouts and a string of unmade projects and non-credits, Avary now finds himself empitted in the most despised of all movie genres, the survival-horror game adaptation. As you might expect, what he's turned in is not quite your usual. **Silent Hill** is an unusually ambitious and atmospheric, if ultimately quite bonkers, adaptation of the Konami game series, with great designs and hugely impressive Patrick Tatopoulos creature work put to work in a plot that tries hard to capture the feel of its source but can't entirely overcome its shambling mythology, beat-

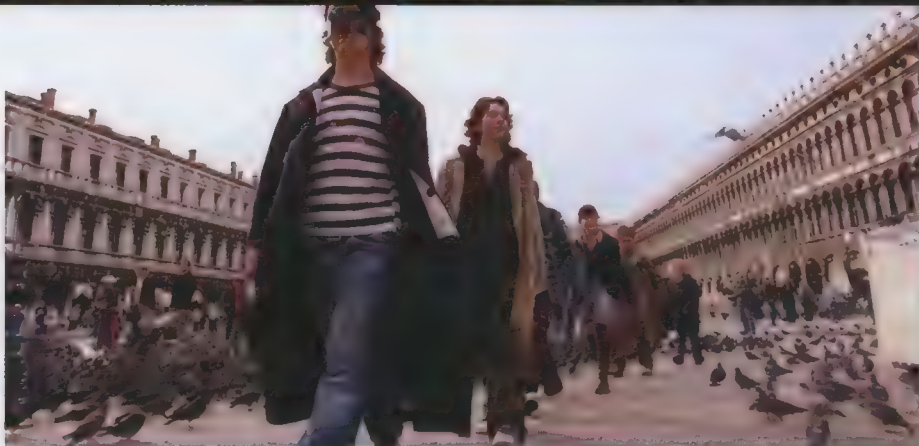
the-zombies plotting, and Sean Bean's brutal assault on an American accent.

Even survivors of the original games would be hard pressed to explain the logic that takes Radha Mitchell's heroine from a mist-shrouded West Virginia ghost town frozen in 1974 to Alice Krige in the year's looniest wig screaming at Pythonesque crowds of local peasantry to burn the witch, though it's no spoiler that the public story about underground coal fires is just a smokescreen for something more altogether hellish. Partly as a result of its genre origins, it suffers from fairly serious ending anxiety, with what feels like a game solution ("Your reward is the truth. Congratulations, Rose. You're here. You did it.") turning out to be just the film's Architect scene, with a whole act of further movie endings to get through before we can

go home. Avary and his French director Christophe Gans (for whom he worked uncredited on *Crying Freeman*) have put a lot of effort into making something more than just a *Resident Evil* clone, with a slow, downbeat, and very unPlaystationly final take on the reality-shifting premise of the games. By then it's outstayed its welcome by a good half-hour, but it's still something to see a game movie with too many ideas instead of too few.

« Silent Hill is an unusually ambitious and atmospheric, if ultimately quite bonkers, adaptation of the Konami game series, with great designs and hugely impressive Patrick Tatopoulos creature work »





An altogether more spiritless adaptation is **The Thief Lord**, from the same Europudding servery that gave us *The Little Vampire* – another internationally-made screen version of a beloved German children's book with a rather more limited following overseas, and even featuring the same lead (a now rather overage Rollo Weeks). Cornelia Funke's novel has been handled for the most part with Potter-like reverence, which is precisely where the problems begin. Unlike Funke's more overtly fantastic novels, *The Thief Lord* is an uncomfortable attempt at a kind of junior magic realism – about a gang of child thieves based in a deserted cinema in a contemporary Venice, under the leadership of a mysterious boy mastermind with an uncomfortable secret. Only late in the narrative does the fantasy device at the heart of the story emerge: a Bradburyesque magic roundabout (carefully redesignated here as an enchanted merry-go-round) with the power to turn adults into children and vice-versa. The book uses this, not entirely successfully, to explore some thoughtworthy issues about childhood and adulthood as viewed from one another's perspective, with rides on the roundabout in various directions proving the achievement of heart's desires for some and rather less rewarding for others. But while the setting and atmosphere are quite effective, the plotting, the adult characters, and the negotiations between fantasy and realism are

« Unlike Funke's more overtly fantastic novels, *The Thief Lord* is an uncomfortable attempt at a kind of junior magic realism »

handled with surprising clumsiness.

These problems are only magnified in Richard Claus's film, which has done a great job on the location permissions but has been way too respectful of the weaknesses in story. Some additional, earlier flashes of fantasy have been dropped in to make the mixture of tones seem slightly less disconcerting, but the effect is far from happy. There's some nice improved business with the cinema, and an attempt to beef up the dysfunctionality of the relationship that gets permanently and incredibly severed at the end, but the whole thing still has that kiss-of-death Children's Film Foundation feel. The adult stars – particularly Jim Carter, Alexei Sayle, and a truly bizarre performance from Vanessa Redgrave reprising her *Devils* character for laughs – are unable to salvage their weakly conceived and written characters; while the kids have been aged a couple of years across the board, with the result that the divorce between childhood and adulthood around which the story was originally built has become a rather uncomfortable essay on the condition of adolescence, which (unlike in *X-Men*) wasn't the point at all.

There's a happier ride on time's roundabout back to a time of innocence in **Slither**, the directorial bow of James Gunn – not that one, but the high-trash screenwriter and Troma alumnus who has risen, if that's the word, from the soil of *Tromeo and Juliet* to lend his pen to *Dawn of the Dead* and the Scooby-Doo films. Disarmingly true to his roots, *Slither* (formerly, for no good reason, *SLiTHER*, a graphical whimsy still pointlessly retained in the closing credits) is an encyclopaedic homage to the vibrantly silly low-budget horror-sf of the eighties, when the youthful video market began to make a new kind of B-feature viable in the hands of low-budget entrepreneurs, mostly fondly-remembered of whom was Charles Band.

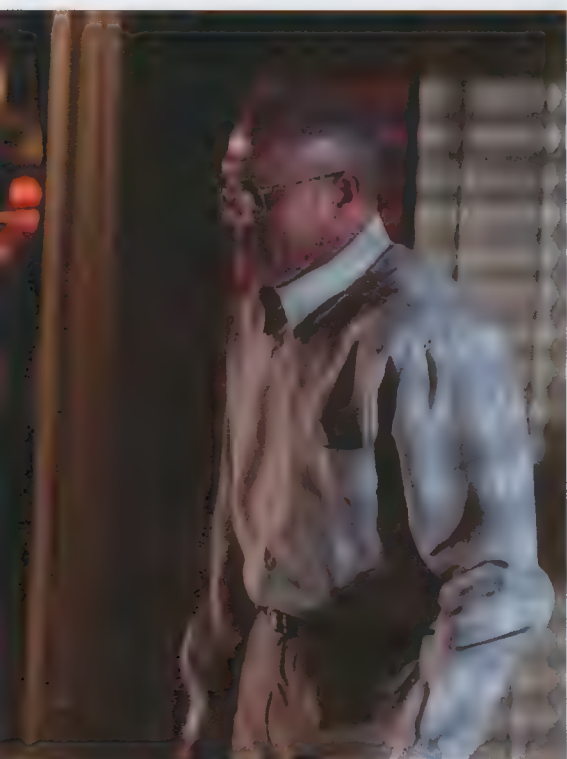
Slither takes a warmly familiar plot (alien parasite meteors into languid South Carolina farmville and starts taking over the natives in escalatingly gross-out set pieces) and injects a single inspired postmodern invention as the driving twist: the invading bioform is blessed with an amazingly convoluted lifecycle which takes it in strict programmed sequence through each of the key early films of David Cronenberg. It starts as *Rabid*, injecting itself into its host via a gross new bodily orifice; modulates into *The Fly*, as the host Brundles up in an escalating orgy of special makeup; lays eggs in the manner of *The Brood* in a bloated host female holed up in a barn; and therefrom gives birth to armies of giant slugs that crawl into your gob *Shivers*-fashion and turn you all into flesheating zombies with the power



to projectile-vomit acid. The exobiological rationale for all this is frankly tenuous ("Some he gets pregnant, others he just takes over with his worms, others he eats"), but if that were the point this wouldn't be the film. An enthusiastic cast delivers lines like "The worms are in my brains!" with authentic commitment, and there are especially winning performances from a brilliantly-cast Nathan Fillion as the laconic sheriff, and from Michael Rooker as the alien host – managing to invest some real humanity in a character whose principal casting requirement is the ability to deliver the line "Meat!" in a dozen different ways and wobble unexpected bits of his body as if from within.

It remains, against all likelihood, something of a writer's film, crammed with homages to dozens of forgotten films that Gunn's contemporaries have spent twenty years forgetting, and dispatching characters in the order that they stop being fun to do dialogue for. Thus the foul-mouthed Mayor, offed early in initial drafts, has had his role extended for no better reason than the sheer delight of coming up with lines for his character ("It looks like something that fell off my dick during the war"). At the same time, enthronement in the director's chair has produced something

« **Slither takes a warmly familiar plot and injects a single inspired postmodern invention as the driving twist** »



a little more conventional than it first set out to be. The central revelation about the heroine's past has been cut, to leave a light-hearted anecdote about our hero catching her trying to skip town as a child. But this was originally intended to be revealed as a flight from the same abusive dad to whom our hero innocently returned her, to be rescued in the end instead by the dour rival she married to the mystification of all – the very same husband now queening it over a hive population of alien zombies. Earlier drafts were also considerably less kind to the leads; of the three characters who limp away from the final scene, only one was originally

planned to make it, and the rather feeble post-credits twist is a significant tonedown of what had been a nastier false-bottomed ending involving Fillion's character. It's far from clear that the darker *Slither* would have actually been a better one; a lot of the script mutation is clearly improvement, such as the holy hand grenade intended for the explosive finale, now the subject instead of an amusing shaggy-dog plotline whose thunder is taken by the more culturally resonant device of a tank of propane. But if you want the writer-director mutation to stick, keep it out of people's noses. There's an awful lot of folks out there armed with cure guns. **Nick Lowe**

Gradisil

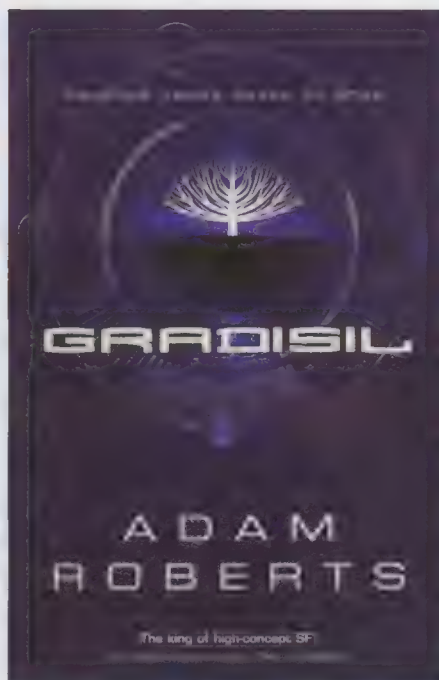
Adam Roberts • Gollancz, 458pp, £18.99 hb

The History of Science Fiction

Adam Roberts • Palgrave Macmillan, 392pp, £60.00 hb

There was once a young maiden in a song who awoke in the morning with an ache in her head and a beard in her lugole that tickled and said: Have some madeira m'dear. After a week with Adam Roberts, I think I know how it must have felt, being persuaded very hard, for a very long time, and now I have a headache. This is not the end of the world. I did learn quite a lot. There is much of interest in the abiding thesis (or conceit) that motors *The History of Science Fiction* (of which more below) from the get-go, a conceit whose Stoppeth-One-of-Three relentlessness only increases when Roberts finally gets to the 20th century, through which he lopes staringly. But the thesis-ridden pleasures and miseries of Roberts's *History* are mere velleities when placed beside the gun-deaf persistence of *Gradisil*, a big-scale story told (with manic persistence) by small-scale people, even when their relentlessly self-referential monotonal first-person narratives are occasionally interpellated (a favourite word of Roberts's, though I occasionally thought he occasionally thought he was writing interpolated) by rhetorical interruptions from the gallery: because whenever the two main monologists of this extremely long novel are asked to explain themselves (there are several genuinely parliamentary moments here, when formal interrogations of the tellers of the tale might legitimately occur) they just up the ante, intensify the white noise of Self-Refer, which Roberts does capture unerringly but for very long stretches indeed, and continue to describe the future of the world in general through the lenses of their particular dysfunctions.

But hold. There is something about Roberts's mindset and method that makes it hard to think of him – either as a critical historian of sf or as an sf novelist – writing about “the world in general.” He is, in fact, a creator of worlds in particular, stripped down worlds, worlds baldly illustrative of thesis; he is a writer whose books work as strobes, illuminating (or not illuminating) extremely narrow avenues of conjecture or vision. He carries to an extremity a way of shaping thought and presentation common to sf writers as a cohort: that familiar (and indeed necessary) propensity of sf writers to think of the world as a case to be argued. Most sf novels are, to a visible and necessary



degree, Thought Experiments, to use a time-honoured and still perfectly viable term. Moreover – despite Roberts's insistence in his *History* that sf has its origins in and takes its essential shape from geography rather than Time – it is surely the case that most sf readers and writers assume that the future is sf's home territory; most sf novels are cartoons, abstractions from the unsayable welter of the all, dramatic renderings of Thought-Experiment arguments about the nature of the world to come. This is ineluctably the Way of SF, and it is no real surprise that Roberts – though his *History* effectively eschews any emphasis on this essential sf grammar

of change through time, and he is unable in that text therefore to describe how sf actually works – does routinely set his own fiction in various sf futures, futures he renders in cartoon strokes of a Savanarolan intensity. But more of that in a moment.

In the 1940s, the American/Canadian neurologist Wilder Penfield devised a brilliant aid to understanding in his field: a cartoon drawing of a homunculus whose features are structured to dramatize the relationship between the brain and its surrounding body. In Penfield's cartoon, those parts of the body with a high number of nerve endings – the eyes, lips, hands, penis, etc – are hugely emphasized over against those parts of the body connected by relatively few nerves to the central brain. Various versions of Penfield's motor homunculus exist. His original shows a homunculus's body draped in profile over a globe representing the brain; more recent versions have the creature face-on; in this perspective, his/her/its face rather resembles the Gorgoneion, the ancient Greek rendering of the Face of Glory, the grotesque countenance of Medusa, her huge obliterating stone eyes, her vast lips, her devouring attention.

Similarly, it might be argued, as each individual sf novel set in the future is a cartoon distortion of the real world – a distortion far more intense than the distortions of mimetic literature because (as we've already said) sf novels specifically argue the case of the world – then each individual sf novel can be seen as a motor homunculus of that world to come. Each sf novel focuses uniquely on some sf-like aspect of an ultimately unimaginable whole: on the famous gorged penis of spaceflight, or the mothering cunt of the worldship, or the unwavering attentive dismembering glare of totalitarian cyberspace, or the fat sucking lips of the gated communities of Fort Lauderdale, or the nerve-parched buttocks of the Third World piling into waterless cities, or the belly of global warming (goodbye Helsinki), or the dry shanks of wetbacks everywhere.

And let us take the image one step farther: if all the motor homunculi cartoons of all the sf yet written were stacked together into one deck, we should be able to figure in our mind's eye a master homunculus, all the sf of the world combining into one quite astonishingly complicated compound dance. We might be able to argue that sf as a whole is the set of all motor homunculi of the world to come.

The problem with *Gradisil* is that it is a motor homunculus on a starvation diet. Roberts has chosen to focus his vision of the next 100 years or so very particularly on the conquest of very near space. The early protagonists of his generation-spanning

SCORES: A CLANKING OF HOMUNCULI

tale are active during the first stages of a seat-of-the-pants exploitation of Earth's magnetosphere, which spirals tree-like upwards from the polar regions, like the sacred tree or Yggdrasil that the title partially refers to, and which adventurous settlers clamber up in their primitive craft, slowly but very cheaply, and without the interference of any Earth-bound government. Once they get 60 or so miles up, a huge domain of free space opens up for those who have been able to afford the trip, and in these vast Uplands they set up the equivalent of mobile homes, and live free, or almost: the costs involved may be minuscule by government standards, but only the relatively rich can undertake the hegira into the Uplands, and once in situ are only able to survive by importing everything necessary for life. They also have to return pretty frequently to Earth, or lose their capacity to return at all, because their homes are necessarily weightless. So if the Uplands are a Libertarian paradise – no laws, no taxes, no pack drill – and if *Gradisil* deliberately homages First SF dreams of bootstrapping into space ahead of hidebound Earth governments, then there are some pretty heavy costs to bear, costs Roberts is clear about. His Libertarians may be physically tough, and think of themselves as resilient, but most of them are trust fund bunnies, parasites on the body politic beneath their free feet.

In any genuinely complex rendering of the future, the Uplands would occupy a side-aisle in the architecture of history, rightly, as a degenerate gated community. But, as we've suggested, the motor homunculus *Gradisil* gives us is anything but complex. Computers and the internet and AIs are mentioned only in passing, with no attempt to render – or even to point at – the hugely complex worlds we are beginning to enact through our marriages with information and performance; there is nothing here, in other words, of the birthpangs of cyberspace, in whose parturition chambers we are complicit blastemata: no weddings therefore in the soup of the new. More mundanely, the political world of 2100 hardly differs from now. Bush America still rules, as does the configuration of nations, and the nuclear family, and religion. As for the world itself, there is no sense of climate change, no sense of crisis whatsoever (several scenes are set in sea-level Helsinki a century hence, but it is a Helsinki seemingly unchanged from today's city: see any near future Stephen Baxter novel for a telling contrast). Nor is there any welling up of Third World populations (in his *History*, Roberts condescends to poor "phlogistic" John Brunner for taking overpopulation seriously in *Stand on Zanzibar*). All in all, the motor homunculus of the novel fatally lacks



Thanks to Adam Roberts for the photos.

« There is something about Roberts's mindset and method that makes it hard to think of him – either as a critical historian of sf or as an sf novelist – writing about "the world in general" »

figuration, except in those aspects Roberts's attention has fixed to like glue.

This may be deliberate; indeed I suspect it almost certainly is. *Gradisil* is a kind of thought experiment in the art of writing a thought experiment. It is also a portrait, conveyed through the two first-person narratives that make up most of the text, of a quite astonishingly dysfunctional family (in a John Brunner novel, they would have been seen as symptoms, not chairpersons). The first part is told by Kara, whose obsession with her dead father and with other matters comes close to clinical insanity, and who never gets it, never understands anything until it's too late. Her main function in the overall story seems to be to get pregnant with the daughter she calls *Gradisil*, who is destined eventually to lead the Uplands out of subservience to a deeply unpleasant American state. *Gradisil*'s life as an adult is filtered through the extraordinarily sour lens of her cuckold husband's perceptions of her. He is rich. He is useless. He is clinically depressed. He whinges about everything under the sun, reserving a residue of creepy unction solely for *Gradisil*'s two children, whom he "knows"

are not biologically his (a supposition that is in fact never confirmed). And in the end – after *Gradisil* has charismatically won the war against America by applying some Eric Frank Russell ju-jitsu to the sclerotic Yankee military – he betrays her to the Americans, a betrayal she has clearly arranged for. *Gradisil* herself may be Roberts's revisionist re-take on two very similar figures from the near past of sf: Casseia, the de-facto President of Mars in Greg Bear's *Moving Mars* (1993); and the charismatic Aenea in Dan Simmons's *The Rise of Endymion* (1997), who overthrows an invidious hegemony and arranges her own betrayal. But he says either nothing, or nothing substantive, about either book in *History*, and his viewpoint narrator in *Gradisil* is entirely incapable of conveying any complex message or providing any perspective, so it's hard to know what Roberts is on about here.

In the end, it is possible to wonder why he has created, in *Gradisil*, a world so starved. Over and above his clear joy in following a conceit to the death, over and above his need to make his books say one thing until they become transparent with wear, there is clearly an agenda here. *Gradisil* is not simply an

exercise. What I have learned, without exactly knowing I've learned it, I may find out late one night. When there is a knock on the door of the mind. When I open my eyes to see the face of Medusa, whose lips open to say I told you so.

The History of Science Fiction is also a work of deliberation; and the portrait of sf it draws is a deliberate portrait of a motor homunculus: a vision of sf as a form of literature which originated, and has been shaped ever since, by a specific religious-ideological clash between Catholic and Protestant ways of viewing the world. I have sometimes used the terms "Catholic" and "Protestant" as roughly synonymous with "Fantasy" and "SF", by way of suggesting that SF owes its birth (though not its continuing development) to the latter movement.

What one might call the Jonbar Point for all of this is the burning at the stake of Giordano Bruno in 1600, specifically (Roberts argues) because his belief in the plurality of worlds radically contradicted the uniqueness of Christ's kenosis and Passion. Sf, Roberts argues, must be linked to Protestantism, and to the gradual liberation of the secular mind, in Protestant countries, from the entailments and allure of religion. Sf, he says, is essentially a spatial voyage; its central texts test constantly the plurality of things: worlds, societies, races, all the alternatives one can (in a sense) travel to.

This, one must say, is all well and good; and it's fun to boot. The problem with Roberts's *History* is that – as with *Gradisil* – he can't let go of the conceit. Nor can he adduce any actual germinal text to substantiate his version of things. The first narratives he mentions whose feel is anything remotely like sf are the Moon and Sun voyages of Cyrano de Bergerac, but Cyrano was an heterodox Catholic; and very soon, therefore, in this long book, one begins to hear thesis grate against the warp and woof of things. And it is a sign of how mercilessly thesis has shaped outcome that it takes over 150 pages, almost halfway through, before we reach the 20th century, leaving 90% of sf to tell with no room to tell it. This is a motor homunculus which is all bum.

But that is to misrepresent the *History*. Roberts would almost certainly demur, as a great deal of effort has clearly been spent shaping his presentation of things in order to further his thesis; but the great value of the book lies in his very numerous and acute readings of individual texts, readings which have at times vanishingly little to contribute to the steatopygous homunculus created in the mind's eye through an incessant reiteration of thesis. There are times, all the same, when patience fades, certainly as we approach the last two centuries. Roberts's thesis requires that nothing significant in the creation of sf (or of the other genres of the fantastic) can have occurred during the period that I (for

one) think of as the birthing ground of the fantastic as a literature: that is, the period between about 1750 and 1820, when the recognition of time as a manifest engine of substantive change began to shape our minds, when the dynamic between Ruins and Futurity began to shake our hearts loose, and when proto sf began to read like sf. Roberts's refusal to contemplate the importance of time in sf specifically constitutes a refusal to give any weight to the invention (during this period) of the notion of imaginable futures (he refers at one point to "the twentieth century's cult of the future"); this complex blanket of refusal is necessary if he is to maintain his thesis at a point way past sell-by, that is at any point after about 1750; and from this point the reliability of his take on the overall picture begins to fade away.

By the time we reach the relatively close past, it no longer really matters that he treats the first decades of 20th century as an enterprise eccentrically definable as "High Modernist Science Fiction", citing decidedly odd candidates for High Modernism like Aldous Huxley, George Orwell, the genius populist Karel Capek, Olaf Stapledon and Katherine Burdekin, though Roberts inexcusably fails to tell his readers that she published that High Modernist classic *Swastika Night* (1937) as Murray Constantine (it was only discovered in 1985 that Burdekin was also Constantine). Riding side-saddle with High Modernism, in the increasingly crabby framing of events the *History* has sunk to, we find "The Pulp", one of which (I have learned for the first time ever) turns out to be *The Strand Magazine*. The main Pulp figures here are Edgar Rice Burroughs (a fair cop, except for the fact that his work was mainly disseminated, from year one, in frequently reprinted hardback volumes) and E.E. Smith (another fair cop, though the bibliography gets a bit tangled). We then leap to 1940, from which point too much goes on for any one historian, especially one with a thesis walloping his brainstem, to cope with.

So it is a book to cherry-pick. Its hundreds of telling remarks are very much worth rediscovering, though the index (surely Palgrave Macmillan is at fault here, as they must be at fault for the large number of factual errors in the text, the kind of boners any fact checker would catch right off), ah the index, that is another review. Enough maybe to say that lots of relevant stuff goes unindexed, but that when (on pages 232 and 344) Roberts lists 23 authors he is not going to discuss, each one of those authors is duly indexed to these pages. They flunk you from index school for doing that. They call it cheating.

I may think Adam Roberts is a bit of a loner, but I don't think he's a cheat. So pick up his *History* and mark the good bits. They won't come back to haunt you. **John Clute**

The Bonehunters

Steven Erikson • Bantam, 891pp, £20 hb

Steven Erikson has returned. *The Bonehunters* is the sixth episode in the ongoing *Malazan Book of the Fallen*, a series which, if maintained at the current standard, will undoubtedly become the benchmark for all future works in the field.

Following the defeat of the Seven Cities Rebellion and the death of Sha'ik, the remnants of the rebel force are besieged at dread Y'Ghata. The fortress, cleverly chosen by rebel chief Leoman for its terrible significance to Malazan's 14th Army, gives the lesser force a psychological advantage in the approaching conflict.

Leaving aside the central siege plot, there are several other 'meanwhiles' (a word you tend to think of a lot when immersed in Malazan's vast tapestry). Here, even the most ardent fan would be well advised to have books one to five on hand as reference points for the many resurfacing denizens of the empire.

One should praise Erikson for his bravery: the plot-strands of Malazan are now thick as tree-trunks, and there are so many of them that you may well expect the author to get tangled in his own colossal web of invention. To his credit, Erikson manages to keep all the plates spinning – just. For a writer whose particular skill has always been his ability to shift scale with dramatic effect (and there are several impressive examples here), Erikson is emerging as a force to be reckoned with; a writer who time and again seems about to fall foul of his own ambitions, yet comes through each test, unscathed.

Conversely, one would hope that *The Bonehunters* marks a zenith for the introduction of new characters and conflicts, and that the ride down the far side of the mountain will be every bit as thrilling as the arduous climb to the top. There are a few gripes: one or two characters do feel a little lost in *The Bonehunters*, old legends from previous episodes who seem contractually obliged to trudge the land despite their irrelevance to immediate situations. Also, the endless switching routine, though expertly handled, encounters problems when some sections are not sufficiently developed before the reader is whisked away to pick up viewpoints elsewhere. It doesn't happen enough to mar the rapid flow of the novel, but is noticeable on occasions throughout the text.

Erikson is an exhausting writer, but it's the kind of exhaustion you get after a marathon of thrills, breathless with anticipation of the adventures yet to come. Don't miss *The Bonehunters*: it's magnificent.

STEVEN ERIKSON

Each Malazan novel is stand alone, though the series always feels like a continuous story. Is it difficult to write within the boundaries you've set yourself by pre-stating the number of books in the series?

I think it makes things easier. I know where the end is and what's needed to get there. Of course, there really is no end – life goes on, and the reader should feel that in the same way that they (hopefully) picked up on that sense of continuity with the opening of *Gardens of the Moon*. We edge in to observe a slice of history, then, ten books later, we edge back out. The nice thing about doing it this way is that again and again I see where I could spin off in a new direction, exploring an entirely different piece of the 'history'.

You have the natural gift of a storyteller. Have you always liked to tell stories?

I'm not someone who can entertain a crowd around a camp fire with some long winding tale – my brain doesn't work that way. It's more of a piece-meal creative process for me, and only through the physical act of writing do I begin to weave together all the disparate parts. This is probably why I'm rarely befuddled by the intricacies of my own plotting in the novels. The challenge has to do with timing more than anything else; and so long as I can keep that sense of timing on track, things seem to turn out fine. At the same time, there always has to be room for spontaneity, although generally not with the main story, the things I need to advance for the series. Often, however, the spontaneous stuff isn't directly to do with plotting; it happens with characterisation. I will have a list of characters among the initial notes. Many will be characters we've seen before, but others will be new (based on settings where I plan to 'stay' for a while, or new story elements relevant to the novel itself), and they will be simply names. And so they remain until I arrive at the first scene where we're going to meet them; at that point I begin to invent.

Has there been anything that you set out to achieve within the first six Malazan episodes that you haven't been able to complete?

I suppose my only regret is the challenge presented by the first 150 pages of *Gardens of the Moon*. New readers either get past that with sufficient interest to keep going, or they don't. Seems there's a fair attrition rate. I remain unsure how I could have done it differently without compromising one of the main purposes underlying that novel and the way it was written. By that, I mean it was intended to arrive, if you will, at high speed – straight into an ongoing story with people in it who have histories and baggage, and with events still playing out, while for others

the dust was long settled, only to be stirred awake again. So, it's a 'beginning' novel that is without a beginning, and that presents serious challenges to the readers.

Bonehunters also felt like a very important book, even compared to the first five. Would you say it is turning point for the series as a whole?

It certainly launches the last major arc but generally, I end up feeling that the most important one is the one I happen to be writing at the time. I know, sounds smarmy, and it's probably some delusional thing I exercise to maintain momentum, but there it is. So far, *Reaper's Gale* has felt kick-ass pretty much from page one...which I take to be a good sign.



Thanks to Dot Lin at Tor USA for the photo

REVIEW & INTERVIEW by DAVID LEE STONE

Even before she was a person, Alice Hastings Bradley was a fictional character. At the age of six, she featured in a children's book, *Alice in Jungleland*, written by her mother, Mary, a well-known author and society hostess. Here, Bradley described how, during a sea voyage to Africa, the young Alice was dressed as a doll and placed in a wooden box, after which she was carried into a fancy-dress party. Much to everyone's surprise, when the box was opened Alice remained perfectly still, 'just like a real doll in a box'.

The sense of relief contained in that anecdote is almost palpable, as well it might be, for Mary Hastings Bradley had a great deal invested in her daughter's good behaviour. The expedition which she had helped to fund was headed for the Congo, to film and shoot gorillas. Bradley had been publicly criticised over her decision to take her daughter with her and she knew that she would be permitted to take on the role of explorer only if she could also demonstrate that she was a competent mother at all times. Thus the young Alice Bradley became the unwilling centre of attention, required to appear immaculately dressed and well-behaved at all times, conforming to society's demands in order to support her mother's claim to a life beyond what society deemed proper. All the while young Alice was, as she later acknowledged, the baggage on the trip, denied the adventures her mother craved because she was too young.

The irony of this was surely not lost on the adult Alice, whose lasting fame rests not on her work as a research psychologist, nor even on her career within the CIA, both carried out in her own name, but for her creation of another fictional character. James Tiptree, Jr was the by-line who unexpectedly came to life, achieving a strong and vivid existence on the page, and providing Alice (Alli) Sheldon, his progenitor, with a voice for all those things she felt she couldn't say as a woman. As it turned out, Tiptree's existence was to prove as fragile as that of Alice in Jungleland. When Tip's true identity was accidentally revealed in 1976, it effectively robbed Alli Sheldon of her voice, while young Alice proved not to be a beautiful doll, but a troubled little girl who struggled hard to come to terms with life as an adult.

The story of how James Tiptree, Jr was revealed to be Alice Sheldon, 'nothing but an old lady in Virginia', is now well known, but the territory between *Alice in Jungleland* and James Tiptree, Jr has so far been little explored. Julie Phillips's ambitious, multi-layered biography now reveals that the life of Alice Sheldon was every bit as strange and exotic as the life she bestowed on Tip; and more to the point, that much of his life was indeed her own.



Alice, Fall 1945
(Mary Hastings Bradley Papers, University of Illinois at Chicago)

James Tiptree, Jr: The Double Life of Alice B. Sheldon

Julie Phillips • St. Martin's Press, 480pp, \$27.95 hb

For much of her life Alli was tortured by the sense of not knowing who she really was. A confusing childhood left her with, on the one hand, a very well developed sense of her own artistic and intellectual abilities (among other things she was an accomplished artist and an excellent mathematician) but on the other, an inability to apply herself to her work in order to improve her skills. She wanted to make her own way, but was reluctant to give up the comforts of her parents' house and money. Yet she was stifled by her adoring mother; and for many years Alli associated love with possession. More than once she described her mother as a 'queen bee', needing to always be the centre of attention, but it is clear that the bond between mother and daughter was very strong throughout their lives.

Alli's acquaintances – almost everyone interviewed for the biography seems to start by saying 'I didn't know her very well' – clearly regarded her as a strong woman who conducted life on her own terms. However, her journals suggest that she was very uncertain about her gender identity and her sexual orientation. She could not come to terms with her wild crushes on women, none of which seem to have been entirely reciprocated, nor reconcile these with the fact that she preferred the company of men as friends, although all her sexual partners appear also to have been male. She could ride a horse, fire a gun, fish as well as anyone she knew; she puzzled over how a woman might reconcile such skills with motherhood and managing a home. In an unfinished essay, 'Femininity and Society: A

A DOUBLED LIFE: TWO VIEWS OF JAMES TIPTREE JR

Discussion from the Standpoint of the Atypical Woman', she wrestled with this dilemma, concluding that male and female were cultural categories, and that the sexes are really divided into men and mothers, and that the female reproductive system was a 'vampire', themes she would often return to in her stories. In the light of this, her eventual decision to more fully 'inhabit' her by-line is perhaps not so surprising, in that she was finally able to give voice to a part of herself that had remained suppressed for so many years.

One might wonder why Sheldon needed Tiptree as much as she seems to have done, considering the remarkable variety of things she tackled during her life. She had an impressive war-time career in the CIA, working on the interpretation of surveillance photographs. Later, she helped her second husband to run a chicken farm, work that turned out to be far more time-consuming than they initially supposed. Later still, she went back to university, finally becoming Dr Alice Sheldon, research psychologist. However, as Phillips shows, the work always came between Sheldon and her artistic side, rather as motherhood had got in the way of writing and exploration for Mary Bradley. Becoming James Tiptree gave Alli permission to write, providing her with a space as well as a voice. Whereas Woolf advocated that women should have rooms of their own in which to work, Alli Sheldon literally took this a step further, and created a persona in which to work. Having said this, I think that Phillips perhaps misses a trick in not considering that having attempted to present Alli as a feminist (I'm not always entirely persuaded of the argument in favour of this), she never really addresses the fact that Alli transforms herself into, effectively, a male version of her own mother, or even, the man her mother would have most liked to be.

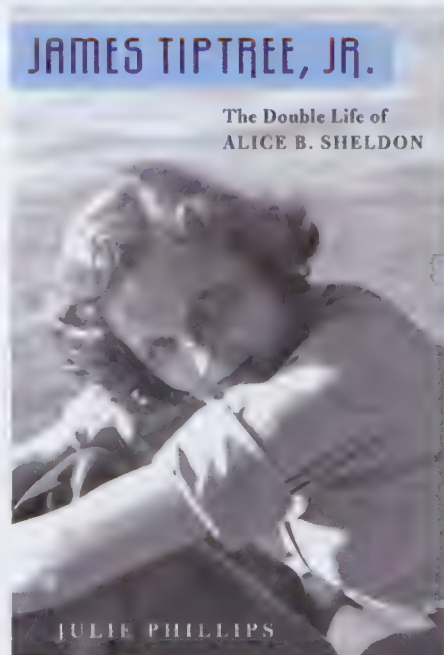
In Tip, Alice Sheldon seemingly reached her apotheosis, brief as it turned out to be. Critics agree that the stories written after Tip's identity was revealed were never as good as those before. It seemed that Alli could write only by distancing her creative ability from her physical self; once the distance was removed, her writing began to wither away. With that went her reason for being. Alice Sheldon had all her adult life suffered from depression. She was terrified of old age, and terrified of what it would do to her and her husband, Ting. They had made a suicide pact, but at the point when Alli decided the time had come for them to die, Ting's only problem was failing eyesight. It seems likely that her depression had convinced her otherwise; consequently, on May 19, 1987, she shot Ting as he lay asleep and then, after ringing a lawyer and her step-son, she turned the gun on herself.

Tiptree's legacy is well-documented.

The discovery that *he* was in fact *she* has prompted much critical discussion on how to read masculinity and femininity in writing, and taught a couple of generations of readers to be more careful about making judgements based on the author's name and supposed gender. The James Tiptree Award is now an institution, promoting work which pushes the boundaries of our understanding of gender portrayals in science fiction; it is supported by one of the most fiercely loyal communities within the sf world.

Alice Sheldon has become very much overshadowed by her own alter-ego, and this biography is therefore a very welcome redressing of the balance. It's all too easy for us to be admiring of the carefree Tip, pounding out his stories, or to acclaim Alice Sheldon's audacity in creating this vibrant persona for herself. It's far too easy to represent the creation of James Tiptree, Jr as a conscious feminist statement, a thumbing of the nose to the masculine sf establishment. To do so is, I believe, to overlook what it was that drove Alice Sheldon to transform herself as she did. Julie Phillips's carefully researched account of the life of Alice Sheldon is a stark reminder of what has happened to too many women, not only to writers, who have tried to find a balance between their daily and creative lives. James Tiptree, Jr triumphed but it was Alice Sheldon who fought every inch of the way, and Julie Phillips who brought that remarkable story to our attention. **Maureen Kincaid Speller**

« Alice Sheldon has become overshadowed by her own alter-ego, and this biography is therefore a very welcome redressing of the balance »



James Tiptree, Jr was a meteor in the science fiction firmament that blazed very briefly but oh so brightly. The first stories appeared in 1968 and attracted little attention, but early in 1969 *Galaxy* published 'The Last Flight of Doctor Ain', and suddenly everything changed. This was a short, intense story about a man who loves planet Earth so much that he sets out to kill all its human inhabitants. It is an extraordinary piece of work which laid out all the characteristics we would come to identify with Tiptree: tightly controlled prose with not a wasted word, plotting that set the reader directly *in media res* and forced them to work out the context for themselves, and above all the curiously erotic equation of love with death. This was not doom-laden, but it was uncompromising. The science fiction world sat up and took notice.

Over the next few years a rapid-fire succession of such stories fizzed in the popular imagination: 'The Girl Who Was Plugged In' which won a Hugo, 'Painwise', 'Love is the Plan, the Plan is Death' which won a Nebula, 'Her Smoke Rose Up Forever', 'A Momentary Taste of Being', 'Houston, Houston, Do You Read?' which won both a Hugo and a Nebula, and in 1972 the masterpiece, 'The Women Men Don't See' which would have won a Nebula (or at least should have done) but for Tiptree withdrawing it from the ballot. This was a time when the new creative freedoms won in the 1960s were bearing fruit and writers were producing intelligent and challenging fictions about sex, fictions that smashed the icons and ignored the conventions. This was a time when the narrow, inward turning world of science fiction had been bust open by the new waves of Britain and America, allowing in a new awareness of literary style and possibility. This was a time when feminism was suddenly having a huge effect not just politically but in literature also, and especially in science fiction. This was a time when writers like Ursula K. Le Guin, Samuel R. Delany, Joanna Russ, Harlan Ellison and others were producing some of their best work. And *still* nobody was doing anything like Tiptree. This was out of left field, dazzling, daring, taking some of the most tired clichés of the genre, aliens and spaceships, and setting them on edge so that they seemed to take you into areas no one in science fiction had ever explored before. Two women in the jungle who ignore their male would-be protector and choose to go with the aliens? This was unprecedented.

The sheer exuberant originality of the stories was enough to capture the eager imagination of science fiction writers and readers, but there was something else which helped to make Tiptree the focus of

everyone's attention: his absence. Nobody met James Tiptree, there was no photograph, there was no biography. The mystery, coupled with such startling work, was too tempting to ignore. Fans began to construct their own biographies. The stories arrived from McLean, Virginia where the CIA had its headquarters, and the stories revealed an easy familiarity with the world of spooks, so Tiptree was clearly a CIA operative. The stories often featured the wild places of the world, which Tiptree must have visited on undercover operations. At one point David Gerrold tried to visit the address the stories came from, but encountered only a startled middle-aged woman who denied any knowledge of Tiptree; this was enough to start a rumour that Tiptree was really a woman, a rumour enthusiastically taken up by Harlan Ellison, though more, I suspect, in the spirit of goading a reaction than because he really believed it. Most people unquestioningly agreed with Robert Silverberg when he wrote in the introduction to Tiptree's second collection, *Warm Worlds and Otherwise*, 'there is...something ineluctably masculine about Tiptree's writing'. Most people at this point included the wide circle of people with whom Tiptree, 'Tip' as he liked to be known, carried on an enthusiastic written correspondence, writers like Le Guin, Ellison, Russ, Barry Malzberg and the young fan Jeffrey D. Smith. For Smith's fanzine, *Phantasmicom*, Tiptree submitted to an interview which spoke of upbringing in Chicago, early experience in Africa and India, time in the army during World War II, all supporting the very masculine persona. When Smith renamed his fanzine *Khatru*, Tiptree agreed to be one of only two male writers (the other was Delany) to take part in a major and very influential symposium on feminism in science fiction. Tiptree's comments upset some of the other contributors, and he withdrew.

Along the way, Tiptree mentioned that his mother had been a famous writer. In 1976 he announced that his mother had just died. Smith checked the Chicago papers and found the obituary for Mary Hastings Bradley, survived by her daughter Alice B. Sheldon. The secret was out, but if fandom was dumbstruck, the effect on Tiptree was even more profound. In this masterful biography, Julie Phillips points out the quality of Tiptree's fiction had already begun to trail off as Tiptree succumbed to pressure from editors to write a novel. Novel length did not suit the intensity and the rhythm of Tiptree's prose, and the knock-on effect was beginning to show. Nevertheless it is also noticeable that although Tiptree went on to produce two novels and several collections of stories after her identity was revealed, never again would they approach the richness or the resonance

« Nobody met James Tiptree, there was no photograph, there was no biography. The mystery, coupled with such startling work, was too tempting to ignore. Fans began to construct their own biographies. The stories arrived from McLean, Virginia where the CIA had its headquarters, and the stories revealed an easy familiarity with the world of spooks, so Tiptree was clearly a CIA operative »

of the early work. Something in the writing fed on the secrecy, on the licence granted by a masculine identity.

Julie Phillips's biography brings us as close to understanding what that something might be as we are ever likely to get. She explores the pampered childhood in wealthy Chicago society, the big game expeditions in Africa when Alice was a frightened little girl, Mary's success as a writer, the failed early marriage, life in the WAC during the Second World War and success in photo-identification which brought Alice together with her second husband, Ting, a period of chicken farming after the war then a brief stint in the lower bowels of the CIA (where Ting had a long and successful career), the latent lesbianism, a late interest in psychology (Alice took her PhD just as her first stories were being accepted), the writing, the depressions, the dependence on ever more potent cocktails of drugs, the toils of growing old, and finally the killing of Ting followed by her own suicide. It is a powerful story of an extraordinary life and told as vividly as we could possibly wish. Out of it emerges a convincing and disturbing portrait of someone unhappy in her self and able to function best only by becoming other. It is a dangerous practice to use an author's biography as a way of explaining their fiction, yet it is nevertheless true that much in this conflicted life fed into the fiction, and the fiction could only really thrive amid the conflict.

We can never know how James Tiptree, Jr went from journeyman to master of prose and plot within the space of four or five stories, that is part of the enduring mystery of being a writer; but through this vivid and readable biography we can discover something of what made her the finest chronicler of sex and death, of human evil and human hope, of loving the alien, that science fiction has ever produced. She blazed in our heavens for a very short time only, but her influence remains strong, profound and inescapable, and this is a superb monument to Raccoona Sheldon, to James Tiptree, Jr and to Alice Bradley Sheldon. **Paul Kincaid**

Shuteye for the Timebroker

Paul Di Filippo • Thunder's Mouth, 320pp, \$15.95 pb

You won't come across a single tired idea or burnt out phrase in Paul Di Filippo's latest collection. His stories fizz with vitality and wit, the language whirls and dances and there's a cornucopia of memorable images. And yet the notes I made for this review include stale old chestnuts such as "cumulative impact – greater than the sum of its parts" and "reports of the death of the short story are greatly exaggerated." A cliché free anthology that inspires cliché: a notion that might just appeal to Di Filippo, a creator of tales that pulsate with paradox.

There are ontological paradoxes in individual stories. 'Distances', for example, is a migraine inducing but utterly compelling thought experiment in recursive prose; while 'Walking the Great Road' is a strange and enchanting narrative loop. But there are also the stylistic paradoxes of Di Filippo's tightrope walk between the quotidian and the weird: he's a fabulist with a gift for naturalistic precision; he tackles massive ideas with polished economy and in telling detail; and he's adept at dredging comedy from the grimmest of narrative scenarios.

Shuteye for the Timebroker is an eclectic and bravura blend of sf, horror, modern fable, metaphysical speculation, surreal metafiction and subversive satire. Pinter meets the Medusa Touch in 'Shadowboxer', a brilliantly overwrought moral fable involving a psychic assassin; 'The Secret Sutras of Sally Strumpet' is an inspired slice of mischief tackling the modern publishing industry; and 'Going Abo' is a concentrated, classic sf-shocker.

Di Filippo's restless imaginings include several excursions into his personal literary heritage. There are single paragraph introductions to each story, offering an extra layer of illumination, and giving the game away in terms of declaring his influences and sources of inspiration. They are the literary equivalent of those moments when Penn and Teller scrupulously expose the workings of their own illusions: against all odds they actually increase the audience's enjoyment of the artifice on display.

There are riffs on the work of Jack Williamson, Lord Dunsany, Edgar Allan Poe, Herman Melville and, perhaps most strikingly, Jules Verne. 'The Mysterious Iowans', a tale of a flawed utopia, inspired by Verne and involving several of his characters, exemplifies Di Filippo's approach. Not content with producing a technically adept, ironic pastiche, he takes Verne's theme of the threats and promises of technology and takes

PAUL DIFILIPPO

it into a world with rich resonances for a contemporary audience.

The title story is a masterpiece of the short form, a tale of a desiccated and utilitarian society, dominated by institutions, in which time is traded for capital – a surreal, subversive and bleakly humorous vision of modern lives out of balance.

Di Filippo's magnificent anthology is an inexhaustible trove of pleasure and unsettling ideas. In mixing the extraordinary and the everyday, he blows Haruki Murakami and Peter Carey out of the water. Meticulously crafted, thought provoking and consistently inventive, this is the most enjoyable collection by a single author I've read in years.

You're a prolific writer of short stories. What draws you to the form?

Short stories are the crack cocaine of fiction writing. Creating one produces a short, intense high. Then you're addicted, and you have to keep on doing it over and over. Semi-seriously, writing novels involves a long hard slog with characters and concepts you

might be dreadfully tired of before reaching the conclusion. The larger aesthetic (and financial!) payoff of novels is certainly worth the anxiety and labour, but short stories allow 75% of the rewards for about one-tenth of the work. And of course, the writer can use the short story form as a test bed for concepts and characters which he may later choose to expand. For instance, I wrote the novella version of 'Spondulix' first, then later turned it into a novel.

You clearly enjoy writing against constraints. The book includes narrative miniatures inspired by the titles of Todd Schorr paintings, a metafictional riff on Herman Melville and a perplexing narrative recursion. Why does so much of your storytelling centre on problem solving processes?

Although I'm hardly a member of the Oulipo crowd, whose members delighted in rigorous formulae for fiction writing, I do confess to a weak spot for intellectual puzzle-making and puzzle-solving in fiction. Patterning, as John Crowley has reminded us, is one of the

essential tools of story-telling, and patterning requires a hefty dose of conscious thought, as well as some good gut instincts. A book like *Gravity's Rainbow* or *Foucault's Pendulum* constitutes a whole mini-universe whose hidden structures invite the reader to utilise his or her mind in a problem-solving fashion. If we often can't unriddle our daily lives, at least we can suss out the schemes of a Lesser Author. Of course, novels of pure detection offer this joy as well. But lately I've come to feel that perhaps I need to focus more on the emotional angle of my narratives and characters. Being too bright and tricky can be a trap.

Magic Realism in New England, re-workings of Melville and Poe, Pynchonesque satire: your fiction reads like an omnibus of new American myths. What fascinates you about America's landscape and culture?

I own up to being an American chauvinist. A booster of the USA and its culture, for all its flaws. If one can imagine every nation having a collective karma, then I will happily accept the karma of the USA above all others. What would I trade my heritage for? Canada's? France's? Not to knock these fine countries, but they just don't resonate the same for someone who numbers among his earliest memories lying on the floor with a colouring book at age four hearing fresh Elvis Presley on the radio. For all its puerile aspects, the day-to-day landscape of the USA, both its art and its mundane qualities, are incredibly stimulating and beckoning to me. The clash of idealism and mercenary lust for money and power; the topography of the land; the scientific and technological breakthroughs – there's no mix elsewhere that can compare. But that's just my take. And I do enjoy reading novels that really deliver a sense of daily life in other countries. For a while I can dream about transplanting myself to Egypt or Trinidad or Brazil. But I know in the end I'd be homesick in a week!

And finally, what attracts you to the fantastic as a mode of storytelling?

A couple of years ago I set out to write a totally mainstream novel (as yet unpublished, with the title *Roadside Bodhisattva*). I made a vow not to use a drop of surrealism or magical realism or even way-out metaphors. I completed the self-imposed assignment, but at the end of the chore I felt like I had one arm tied behind my back the whole while. When you see dimensions beyond the mundane, it's untrue to yourself not to include them in your fiction. SF and Fantasy are really the ultimate realism, because they include all possibilities. Politically and culturally, most people wear blinkers that inhibit seeing ways out of our stale ruts. Only through wild-eyed dreaming can we achieve new ways of living.



REVIEW & INTERVIEW by ANDREW HEDGECOCK

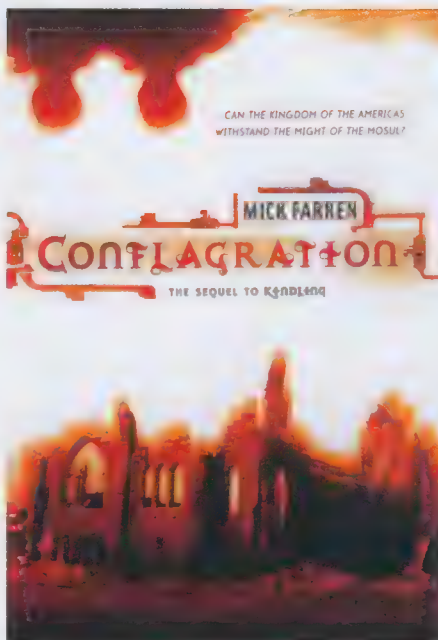
Conflagration

Mick Farren • Tor, 396pp, \$27.95 hb

This is a novel from a man with a distinctive voice: it sounds like wet gravel being slapped. It is fair to say that nobody sits on the fence when it comes to having an opinion on The Deviants' music. His non-fiction is another delight entirely; opinionated and funny, but also containing a sharp insight and genuine love of pop culture. His third angle of attack is his fiction. True, his early novels are now cited as protocypberpunk but, almost unheralded, he has been producing novels at a steady rate for over three decades.

This brings us to *Conflagration*, second in his Flame of Evil steampunk series. It continues the story of The Four, the psychics assembled in *Kindling*. In this multiverse reality, the Mosaic religions never got going, the European occupation of America stalled at the Appalachians, and a barbarous Mosul empire, analogous to the Caliphate, has reached the English Channel and the Baltic. The viewpoint switches democratically between our four heroes and heroines who are aligned with the North American and Nordic nations. They are not too differentiated, which could have been a flaw but actually makes for a smooth read.

So far, so right wing militaristic wish-fulfillment fantasy. However, unlike the new pulp writers of that sub-genre, Farren is of the left. There is no need for him to camouflage fascist heroes by making the villains even more right wing. And when his characters move from the American war to



a dissolute Europe, the way of Turtledove gives ground to a Moorcockian playground. There is no hypocritical voyeurism here; this book is unashamedly decadent. Possibly even too much so – there is a chapter-long orgy that would render this unsuitable for reading on public transport. But no characters are punished merely for their lifestyles.

Anachronisms pop up. Joseph Conrad and Richard Branson coexist with fictional characters such as Harry Palmer. In one brilliantly wacky bit we are told that, instead of the Maginot Line, the Franks had the Clouseau Wall. Naturally it failed. That sums up this book. It's a guilty pleasure that you don't have to feel guilty about. **Jim Steel**

Jack of Ravens

Mark Chadbourn • Gollancz, 368pp, £17.99 hb

Jack of Ravens is a very ambitious novel. It's the seventh volume set in Chadbourn's contemporary England – where magic and the gods have returned – and he's created a story that not only stands alone (for the newcomers) but also delivers an intriguing tale (for the series veterans).

The focus is back with Jack Churchill (after the events in *Always Forever*) who arrives in the deep past with a magical sword in his hand; a single memory of his own life in his head; and a large black spider embedded in his shoulder. A series of encounters with a shaman, a golden-skinned goddess and a creature made entirely of Blue Fire sends Church across time to stop history being rewritten by The Army of the Ten Billion Spiders. If the Army win, Mankind will be enslaved, Church and his fellow Brothers and Sisters of Dragons will be dead and Existence will at risk. (So nothing too bad really then.)

Chadbourn takes all of the characters and events from the previous six books and starts to re-knit them into a completely different configuration. It's a clever approach, undoing what was done, shuffling the players into new positions and letting their personalities move them forward anew.

And they move almost anywhere. Covering a range of 2,300 years, we visit the Iron Age, the Roman Empire, Victorian England and even the swinging 60s. He brings each culture to life carefully, merging story with well researched facts to create a convincing atmosphere.

None of Chadbourn's novels have reached this far before but none of his previous novels have felt this uneven either. There's a definite sense of hurry in much of the story and huge parts of the tale are summarised into a single paragraph in order to continue with the central plot. There's also a marked change of writing style part way through the second chapter and overall it lacks Chadbourn's customary crafted prose.

But when compared to the rest of the market, it still stands proud of the masses. It's fresh and challenging, and there's three times more story in *Jack of Ravens* than most of the Fantasy novels out there. **Sandy Auden**

Notable New, Forthcoming & Received-Too-Late Books

A Mention Here Does Not Preclude A Full Review

The Complete Stephen King Universe by Stanley Wiater, Christopher Golden & Hank Wagner (St. Martins Griffin, 512pp, \$21.95 tpb). Revised and updated to include the Dark Tower series. Out now ♦ **The Mammoth Book of Extreme Science Fiction** edited by Mike Ashley (Robinson, 562pp, £7.99 pb). A collection of hard sf stories by Charles Stross, Robert Reed, Alastair Reynolds, Greg Bear, Harlan Ellison, Greg Egan, Stephen Baxter and others. Out now ♦ **The Baby Merchant** by Kit Reed (Tor, 334pp, \$24.95 hb). Dark thriller about baby adoption when babies are rare. Out now ♦ **The Good People** by Steve Cockayne (Atom, 343pp, £12.99 hb). Dark fantasy for young readers. Out now ♦ **Vintage PKD** (Vintage, 208pp, \$11.95 tpb). A collection of Philip K. Dick's novels and stories. Out now ♦ **The Machine's Child** by Kage Baker (Tor, 351pp, \$24.95 hb). New Company novel. September ♦ **Scar Night** by Alan Campbell (Tor UK, 517pp, £17.99 hb). Volume one of The Deepgate Codex, from new Scottish author. Out now ♦ **The Lies of Locke Lamora** by Scott Lynch (Gollancz, 505pp, £18.99 hb/£12.99 tpb). Book One of the Gentleman Bastard Sequence; new fantasy, new author. Out now ♦ **Warrener's Beastie** by William R. Trotter (Carroll & Graf, 686pp, \$17.95 tpb). Thriller/fantasy set in the Faroe Islands. Out now ♦ **Keeping It Real** by Justina Robson (Gollancz, 279pp, £18.99 hb/£12.99 tpb). Quantum Gravity: Book One. 'Meet Lila Black...Half woman, half cyborg...all attitude!' Out now ♦ **Infoquake** by David Louis Edelman (Pyr, 400pp, \$15 tpb). Volume One of the Jump 225 Trilogy. Debut novel set in 'the corporate boardroom of the far future.' Out now ♦ **Into the Unknown: The Fantastic Life of Nigel Kneale** by Andy Murray (Headpress, 190pp, £12.99 tpb). Biography of *Quatermass* author, including interviews and 100 photographs. Out now

« **Chadbourn takes all of the characters and events from the previous six books and starts to re-knit them into a completely different configuration. It's a clever approach, undoing what was done, shuffling the players into new positions »**

Learning the World

Ken MacLeod • Orbit, 416pp, £6.99 pb

Atomic Discourse Gale is a teenage girl who writes an online journal called *Learning the World*. Darwin is a young male astronomer looking for a hypothetical outer planet. She is on the sunliner *But the Sky, My Lady! The Sky!* He is on a world called Ground. Her starship is entering his solar system, and their two cultures are on a collision course.

Learning the World is subtitled *A Novel of First Contact*, but neither the overall story nor the namesake narrative-within-a-narrative are quite what they seem. MacLeod has established himself as one of the most thoughtful and clear-eyed of British sf novelists over the past decade, but he also generates drama by turning the tables on his readers' expectations, if not sending their sacred cows to the slaughter.

The novel starts with the well-worn, perhaps even clichéd, premise that humans will colonise the galaxy over thousands of years using slower-than-light spacecraft. The only problem for this enlightened and civilised mission is that humanity has finally encountered intelligent life, so their plans for colonisation have inevitably taken on a more colonial complexion.

And the creatures with which MacLeod has populated the world of Ground are none other than the much-vaunted Alien Space Bats of science-fictional handwaving fame. As a starting point, this has a great deal of humorous potential, but it also sets the author a serious problem of credibility. MacLeod rises to the challenge, developing a plausible chiropteroid civilisation made up of rounded characters who are sometimes more human, and indeed more humane, than the passengers and crew of *But the Sky, My Lady! The Sky!* As one character on the starship observes, "His prehistoric ancestors seemed more alien than anything down on Destiny II. No, that wasn't it: they were precisely as alien, and the aliens as prehistoric."

Learning the World is a coming-of-age story written in the lucid and muscular prose of a writer at the height of his powers, but MacLeod doesn't shy away from the playfulness that real experience allows. Wit and insight go hand in hand, drawing the central theme into ever-sharper focus. The bat-people of Ground have to grow up, but so do his human colonists; and so by extension do we.

MacLeod has poured a bittersweet new wine into the proverbial old bottle. This novel may well be savoured as a classic vintage as it matures with age. **Andrew J. Wilson**

Last year didn't just see the successful resurrection of *Doctor Who* on television.

The regeneration process was also carried over into an effective relaunch of the *Doctor Who* novels published by BBC Books, changing them from wannabe serious sf novels back again to adventure stories for older children.

Those involved with *Doctor Who* books over the years have often described them being amongst the best media-inspired fiction around – faint praise, you might think – but if there's one thing that can be said about these new novels, it's that they definitely provide an authentic recreation of the current television series when it comes to tone and content.

Certainly, both *The Resurrection Casket* and *The Stone Rose* echo the show's interest in fast-paced narratives, easily understandable emotions and the most superficial of scientific justifications to support whatever interesting pictures the writers hope to create. Richards sets his Treasure Island-inspired narrative – concerning the search for a long-lost space-pirate and his legendary treasure – on a human colony world located in an area of strong electromagnetic interference which forces humans to abandon electronics in favour of steam-driven technology.

Meantime, Rayner's main villain is a wannabe sculptor in ancient Rome who turns people literally into stone, courtesy of a misplaced 24th century Genetically Engineered Neural Imagination

Engine (GENIE). Whether steam-driven spaceships or wish-fulfilling genetic experiments could actually work is – frankly – completely beside the point, and would only get in the way of the stories!

Of the two, Richard's novel best grasps the show's approach to death, pitting the Doctor and his friends against seriously single-minded, homicidal robots while also explaining how a pirate's black spot can act as a marker for a hideously efficient, albeit terribly polite, alien killer (which likes to be called 'Kevin'). In contrast, when Rayner midway through her novel – brings the Doctor back to the present day so he can tell Rose's boyfriend that she's dead, it seems an almost malicious opportunity to put 'poor Mickey' through the grinder for, ultimately, no good reason – because, of course, the Doctor then realises he's wrong and pops back in time to save her.

Real sf? Nah. Good page-turners for young and young-at-heart readers looking for something just a little bit different? Yeah; the tenth Doctor's quite definitely 'In'. **Paul F. Cockburn**

Doctor Who: The Resurrection Casket

Justin Richards • BBC Books, 256pp, £6.99 hb



Doctor Who: The Stone Rose

Jacqueline Rayner • BBC Books, 256pp, £6.99 hb



Impossible Stories

Zoran Živković • PS Publishing, 389pp, £25 hb

Most readers of *Interzone* will be familiar with the work of Serbian writer Zoran Živković. Indeed, roughly two-thirds of the stories in his new collection made their English language debut in this magazine. But even for those with eight years' worth of back issues stacked in their spare room, this anthology deserves serious consideration. The hardback version is beautifully presented, and has been limited to 500 numbered copies, each signed by the author.

Živković's writing has been compared to Kafka, Murakami and Poe. It calls to mind Goethe's *Faust*, especially with the introduction of a range of all-powerful interlocutors whose sole purpose it is to offer the protagonists an escape from their (usually) self-created prisons.

The collection opens with *Time Gifts*, a suite of four stories which explores the relationship between the writer and his craft. If this is your introduction to Živković, then it's a perfect place to start. Each of the stories builds on the last, exploring the same themes, but from a different point of view, with the whole suite unified and consummated in the final piece. The stories read like post-modern fables, at first deceptively simple, but becoming more opaque as the suite progresses. This parallel construction is both fresh and engaging. Recurring motifs surface here and there, binding the separate pieces into a satisfying whole.

Part Two, *Impossible Encounters*, takes

us into even more surreal territory in an exploration of the responsibility of the author for his creations. Throughout, the settings are at the same time anonymous and relevant. The stories could be set anywhere, although there is a European feel to the places and characters.

This is followed by the third section, *Seven Touches of Music*, in which the author uses a variety of different sources of music to draw his characters into his bizarre worlds. His protagonists come in all shapes and sizes, most bewildered and lonely, and trapped by their own compulsions.

Živković was awarded the World Fantasy Award for Part Four *The Library*, and it is in this suite that the author's engines of madness are tuned to their finest. The six pieces that comprise the sequence have a why-didn't-I-think-of-that level of originality running through them like the writing in a stick of rock. Živković piles invention on invention with unselfconscious ease.

Five Steps Through the Mist aptly describes the reader's progress through the twenty-nine pieces that make up *Impossible Stories*. Each story demands time and thought. The mind needs space to untie the knots that Živković has wrought. By the time we reach this last suite, however, we find that meaning is not so easy to extract. It dissipates under close scrutiny like a handful of the eponymous mist.

Impossible Stories is a sure sign of the maturity and bravery of Živković as an author. He must trust not only his own mastery of the craft, but also his readers' ability to play their part, by allowing the stories a place in their subconscious and bringing them to their final fruition. **Peter Loftus**

unlike Winston Smith with his work on language. So this also ends up being a more abstract book than Orwell's. It's also less concerned with the story of how this future world was created, with how we got there from here. That's not the point of the story: the point is what a society would feel like if every aspect of its citizens' lives was controlled.

But, like Orwell's book, it's not lost any of its terrible contemporary relevance. It's not a book about Soviet tyranny *per se*, but about any world-view which claims to have the only route to truth. In many ways, its imagery is even more striking than Orwell's – the future city, for instance, where all citizens live in transparent houses, the shades only being lowered when they have permission to have sex.

This new translation by Natasha Randall is a bit lumpy in places – the informality of the dialogue and the formality of the prose run up against each other at times. But *We* is still ferociously readable, hugely innovative, and far more than just a historical document. **Graham Sleight**

Paragaea (A Planetary Romance)

Chris Roberson • Prometheus, 400pp, \$25 hb/\$15 tpb

Leena Chirikova, the last female cosmonaut, is orbiting the Earth in the radiation-soaked van Allen belts when her spacecraft strikes a silvery anomaly and is deposited into space above a planet that is not her own. After heroically surviving re-entry burn-up and then planet-fall into a river, she is catapulted into the strangeness of her new environment when she is captured by a group of jaguar-people, who hog-tie her and cart her off into the jungle. She is rescued in short order by Heironomos 'Hero' Bonaventure, a British sailor from the Napoleonic era, and Balam, exiled prince of the Sinaa, the jaguar-like race of 'metamen'. In the company of these two roguish privateers, she sets off into the strange world of Paragaea to try to find a way back to the planet she was born on. On their quest, they encounter hazards and wonders aplenty, meet strange new enemies and companions, and uncover some of the mysteries of the planet's genesis.

In *Paragaea*, Roberson has made an attempt at reinventing the classic 'pulp' sf adventure story a la Edgar Rice Burroughs, updating it with more modern tropes and ideas. Many of the mysteries the adventurers encounter are based in 'real' science (speculative or otherwise), like wormhole travel, helium dirigibles and uploaded intelligences. Even so, it's strictly an adventure quest story, and suffers slightly from being somewhat caught between camps. The sf tropes aren't dealt with in a 'hard' enough manner to truly subvert the pulp format, and there's just not quite enough swashbuckling action to make it the rollicking tale it could have been. The pace is fast, focusing on the events that really move the narrative, and lengthy combat scenes might well have acted as baggage. But the reader may be left feeling that the real meat of the adventure is passed over; if one's protagonists are fighters, one tends to want to see them fight. Nevertheless, *Paragaea* is a fun read, in a way that harder sf rarely achieves; not too demanding, but compelling enough to keep the pages turning and the reader's interest piqued. **Paul Raven**

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Yevgeny Zamyatin • Modern Library, 202pp, \$12.95 pb

Yevgeny Zamyatin was born in Russia in 1884, and died in Paris in 1937. He wrote many stories, essays, and plays, but his best-known novel *We*, an indictment of the totalitarian mind-set completed in 1920, incurred the wrath of the Soviet authorities – hence his exile to France. It was an acknowledged influence on George Orwell's *Nineteen Eighty-Four*, and has been more or less continuously in print in English since then.

There are many similarities, but this is a more purely science-fictional book than Orwell's, with a setting farther removed from ours. The narrator is called D-503 – all characters are named with letters and numbers in this future world – and he is a mathematician. He's one of those responsible for the state's spaceship, *The Integral*, which will take the news of its glories to the stars. He tends to see things in mathematical terms,

ParaSpheres: Beyond the Spheres of Literary & Genre Fiction – Fabulist & New Wave Fabulist Stories

Edited by Rusty Morrison & Ken Keegan • Omnidawn, 637pp, \$19.95 tpb

The fact that the editors of *ParaSpheres* choose to bracket the stories in this anthology with an Editors' Note, an Introduction (subtitled 'A Memoir in the Form of a Manifesto') and an Afterword ('Why Fabulist and New Wave Fabulist Fiction in an Anthology Named *ParaSpheres*?') suggests something of a crisis of identity, which appears to have as much to do with marketing and categorisation of this volume as it does with the stories themselves.

It's not as if they were particularly breaking new ground, at least as far as the sf/fantasy genre is concerned. *Conjunctions 39: New Wave Fabulists*, edited by Peter Straub, was published in 2002, while Ellen Datlow and Terri Windling have been selecting stories from a wide range of genre and non-genre sources for their *Year's Best Fantasy and Horror* anthologies as far back as the late 1980s.

Outside the genre, the so-called mainstream has always included a significant element of the fantastic (indeed, some would argue that realism is a relatively recent introduction). Writers like Salman Rushdie, Tom Robbins, Yann Martell, Haruki Murakami, Jeanette Winterson, Russell Hoban or Alasdair Gray freely mix elements of myth, fantasy, fable and realism without, it seems, overmuch concern about blotting their literary credentials.

ParaSpheres (the title is intended to refer to "spheres of literatures that are parallel to,



rather than part of, literary fiction") brings together a range of stories and writers from the crossover area between mainstream and sf/fantasy in what used to be called 'slipstream' or – thankfully briefly – 'interstitial' fiction, and now seems to come under a confusing welter of titles. (The editors add one more: "serious non-realist fiction" just to be on the safe side.)

Of the fifty stories from forty-four writers featured (Michael Moorcock, Ira Sher, Rikki Ducornet, Justin Courter and Leena Krohn each get two bites of the cherry), twelve are reprints, several of considerable vintage. These also tend to be from more genre familiar writers: Alastair Gray's 'Five Letters from an Eastern Empire' (1979); Angela Carter's 'The Cabinet of Edgar Allan Poe' and Rudy Rucker's 'The Jack Kerouac School of Disembodied Poetics' (both 1982); Kim Stanley Robinson's

thoughtful alternate history of the atom bombing of Japan, 'The Lucky Strike' (1984); Ursula K. Le Guin's 'Birthday of the World' (2000), and Michael Moorcock's 'Cake' (2005). On the other hand, the editors have cast an impressively wide net, even picking up Stephan Chapman's neat little fable 'Losing the War' from *Scheherazade 22* (2001).

Of the less familiar writers, the contributions present something of a mixed bag, ranging from the dark comedy of Justin Courter's 'Skunk', Kate Karsten's wry post-feminist take on happy-ever-after fairy tale endings in 'Ever and Anon' and Paul Perkin's magic realist 'The Magnificent Carp of Hichi Street'. Laura Moriarty's 'Maryolatry' (an excerpt from a forthcoming sf novel *Ultravioletta*) is probably for people who find Steve Aylett's prose style a little too staid, and reads like Joanna Russ on acid. Equally weird, challenging or literately self-reflexive are Robin Canton's 'B, Longing' and Laura Mullen's two pieces, 'The Beginnings, Middles and Ending's Ball' and 'English/History'. You pays your money...

As a collection of stories, and an introduction to a number of interesting new writers, *ParaSpheres* is fine, and well worth your attention, although as a project, a signpost to what exactly constitutes New Wave Fabulism, it leaves just as many questions unanswered. **Stephen Jeffery**

The Book of Ballads

Charles Vess • Tor, 192pp, \$14.95 tpb

The Book of Ballads is a many splendoured affair, covering graphic novels, fantasy and folk tales combined with an interesting folk discography. As befits a collection, the tales range from being straight sequential art to illustrated poetry to drama and are taken from the *Books of Ballads and Songs* printed by the Green Man Press.

Each ballad has been retold by a different writer, including Neil Gaiman, Jane Yolen and Charles de Lint, but all the stories are illustrated by Charles Vess, whose art brings these ballads to life. He treats us to the Rackham style drawings familiar from the Sandman fairy stories through cartoony art to Art Deco for *Tam Lin*. Each tale has its own style and his illustrations lift the words from the page, deputising for the lack of music.

While the reader is enchanted, the tales themselves remind us that Faery is often a quagmire of transformation and deception on both parts – human and fey. Charles de

Lint re-imagines the 'Twa Corbies' as part of a contemporary world giving the reader a strange sense of *déjà vu*, while Jane Yolen firmly sets her story in the Highlands, retelling 'The Great Selkie of Sule Skerry' in a more traditional manner. The original written versions act as a postscript to each tale, reminding the reader of the source material aiding the reader to see the folk tale as a pure story, one which relies upon its own archetypes and stock without external motivations yet endlessly malleable.

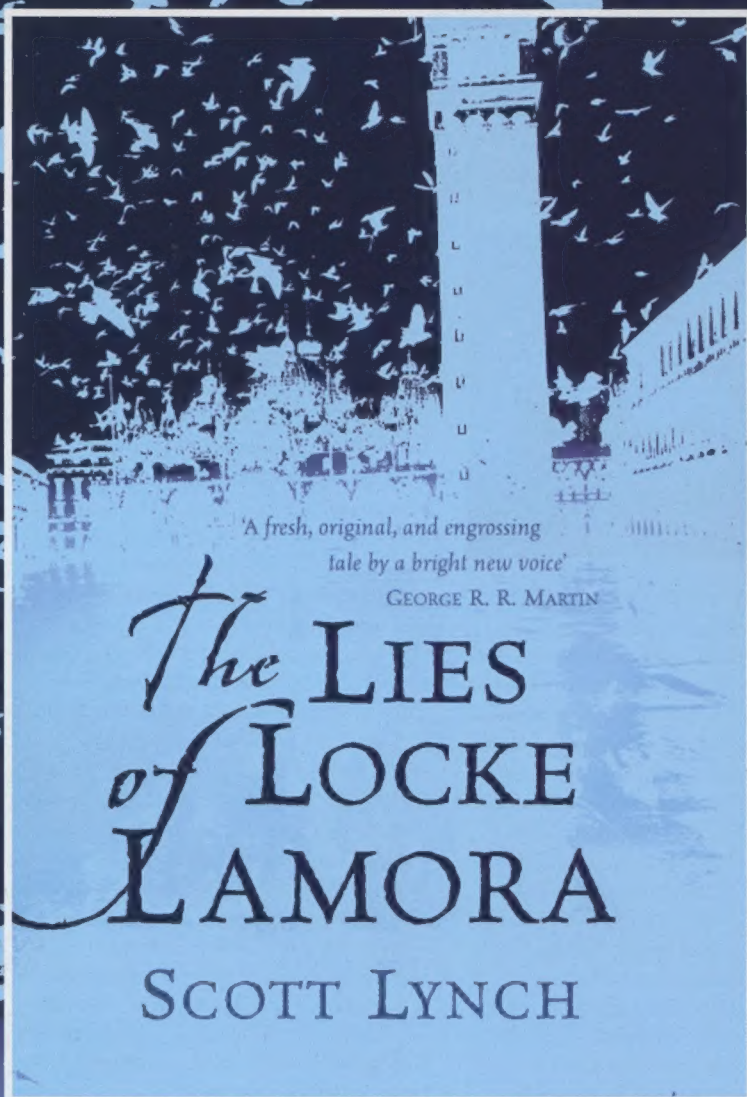
Terri Windling's introduction acts as a brief overview and history of the genre as well as providing an intriguing overview of the modern scene, pointing the curious reader into surprising directions.

As a whole the book reminds the reader of the variety of tales and the compressed nature of their plots. It is very much a collection for dipping into, rather than reading in one session but it repays re-reading and might well prompt the curious to follow the leads. From a set of writers such as this, one would not expect anything less than a very good read and fortunately this does not disappoint.

Iain Emsley

« *The Book of Ballads* is a many splendoured affair, covering graphic novels, fantasy and folk tales »





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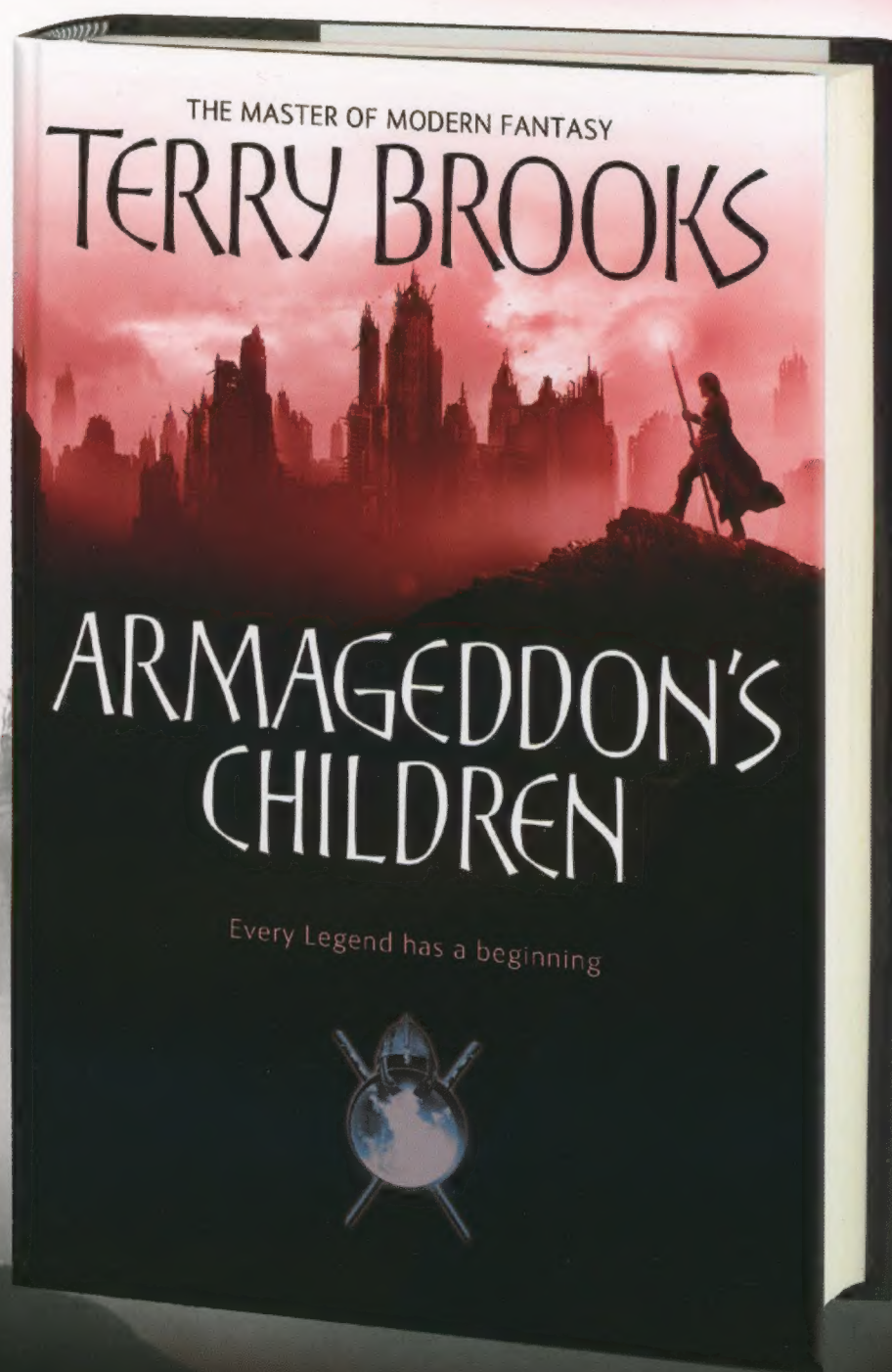
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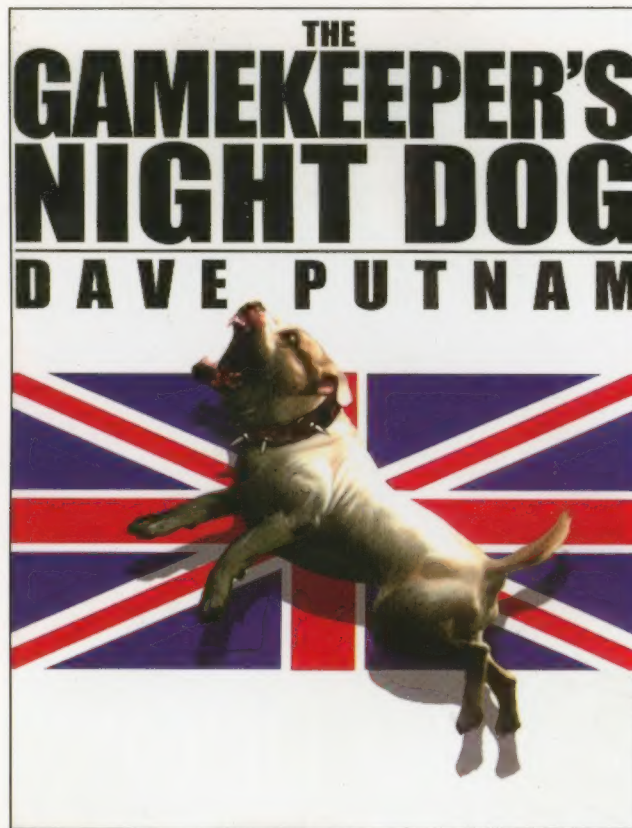


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Novel 4: *Britain Uber Alles*. Set in the 29th century, Britain's one world government has enjoyed centuries of peace, all the while preparing for a prophesied interstellar war, which explodes across the galaxy ahead of schedule. This novel will be available February 2006.

All four novels are available on Amazon.com or www.workingamericanbulldog.com